Montana Department of Environmental Quality

New Source Review Permitting Program Review

FINAL REPORT

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Conducted by the

U.S. Environmental Protection Agency

Region 8

999 18th Street, Suite 300

Denver, Colorado 80202

NOTE THAT THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEW SOURCE REVIEW PERMITTING PROGRAM REVIEW (FINAL REPORT, SEPT 2004) IS MISSING APPENDIX B, C AND E AS OF 18 MAY 2016

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EXECUTIVE SUMMARY FOR NSR PROGRAM EVALUATION MONTANA

During the week of June 23, 2003, the Region 8 Environmental Protection Agency (EPA) office conducted a review of Montana's New Source Review (NSR) construction permit program. The program review consisted of reviewing the overall NSR program and reviewing the Best Available Control Technology (BACT) process the Montana Department of Environmental Quality (MDEQ) uses. The overall program review used the nationally prepared evaluation checklist. The BACT process review consisted of reviewing the BACT analysis of all 9 Prevention of Significant Deterioration (PSD) construction permitting actions since 1999.

The purpose of the program review was to evaluate the implementation of the construction permit program and note practices that other agencies could learn from, document areas needing improvement, and learn how EPA could assist MDEQ in the future. EPA conducted these program evaluations as part of its obligation to oversee and review state programs it approved for implementing the NSR program.

As part of the programmatic review, Mike Sewell, EPA-OAQPS; Catherine Collins and Christopher Ajayi, EPA-Region 8, met with the MDEQ staff, Dave Klemp, Air Permitting Section Supervisor; Vickie Walsh, Compliance Section Supervisor; Dan Walsh, Environmental Engineer Specialist, Preconstruction Lead Worker; Angelia Haller, Air Modeling; Debbie Skibicki, Environmental Engineer Specialist, Title 5 Lead Worker; and Julie Merkel, Air Quality Specialist. In preparation for the review, the state completed the NSR program evaluation questionnaire. The state's responses on that questionnaire were the basis of discussion during the program review (Appendix A).

EPA reviewed all of the BACT analyses in all 9 preconstruction permits issued or drafted since 1999. The following table shows the files reviewed.

New Source Review Permit Reviews	
Company Name	**Permit Number/Date Issued**
Graymont Western U.S., Inc.	1554 / 11-01-00
Plum Creek Manufacturing – Evergreen	2602 / 8-10-02
AgriTechnology Montana LLC	2835 / 11-06-01
Rocky Mountain Power	3185 / 6-11-02

New Source Review Permit Reviews	
Plum Creek Manufacturing – Columbia Falls	2667 / 12-23-99 (2 actions)
Louisiana-Pacific Corp. – Missoula	2303 / 8-24-00
Roundup Power Project	3182 / Date of Decision 1-31-03
Continental Energy Services	3165 / 6-7-02

Executive Summary Findings from the NSR Program Review

During the programmatic review it was noted that MDEQ's NSR program has evolved and improved in the last 5 years. Also, MDEQ has made many improvements so the construction permit conditions can be easily incorporated into the Title 5 operating permits. EPA is encouraged by the progression of MDEQ's construction permitting program. Below are the significant findings of the NSR program review. EPA has arranged the comments into three groups: areas of major improvement for the review period, areas where improvements can still be made, and areas where EPA can assist MDEQ to strengthen its program.

A. The following programmatic areas were identified as areas where the MDEQ has improved the program in the past 5 years:

1. Web site – The web site contains links to the state's rules and regulations, permit guidance, application forms, public notices, preliminary determinations, draft permits, and final permits. MDEQ has recently put all of the permitting actions on their web site. This has made the permits more readily available to the public and to EPA. The web site is a great addition to the permitting program.

2. Records – MDEQ maintains excellent files and administrative records for its construction permits and adheres to the applicable state administrative requirements.

3. Application Completeness – MDEQ does a good job ensuring applications are complete.

4. Permits – MDEQ's permits are well written, clearly indicating what is approved for construction. Generally, the permits include appropriate terms and conditions to ensure that BACT will be installed and operated and include appropriate emission limits in order to ensure that NAAQS and PSD increments will be protected. However, MDEQ needs to ensure that the short-term limits established in the permits have averaging times within the same time frames as the NAAQS and increments, as necessary. The permits include appropriate requirements for

testing, monitoring, record keeping and reporting. More detailed comments on the BACT analysis review are provided later in this report.

5. Public Involvement – Montana has changed the rules to allow for public notice which is now at least as stringent as what is required by EPA. MDEQ does a very good job in providing an opportunity for public involvement. Public notices are well written and widely distributed, including being posted on the MDEQ web site. MDEQ does a good job in preparing written responses to comments.

B. The following programmatic areas were identified as areas where program improvements can be made:

1. Synthetic Minor Source Tracking – MDEQ agreed it would be beneficial to track synthetic minor NSR sources in their database. MDEQ will look into making a field in the permit database to track synthetic minor status.

2. Fugitive Emissions – MDEQ will review the Federal Register on how to count fugitive emissions for NSR permitting. Currently, MDEQ does not consider fugitives in the applicability determination for NSR/PSD for non-listed source categories. MDEQ will continue to count fugitive emissions for the 28 listed categories. Montana's rule will not need to be changed as it already includes provisions for fugitive emissions.

3. Increment Tracking – MDEQ has an informal list of the increment/baseline areas in the state and will be working to have every source in the state tracked for increment consumption, as appropriate. At the time of the review, the anticipated time frame to have complete this project was by the end of 2004. MDEQ is currently working with EPA and other states to address increment tracking. MDEQ should provide EPA with a modeling protocol for review on the methods used to track increment consumption. MDEQ should work to formalize the increment and baseline lists.

4. Changes in NSR program – In order to keep up with the current changes and court cases that might affect its program, MDEQ should monitor the Technology Transfer Network (TTN) on a regular basis. Currently, MDEQ reviews the TTN as needed, such as reviewing the TTN on a quarterly or semi-annual basis to keep current with national permitting actions.

C. The following programmatic areas were identified by MDEQ as areas where it needs further assistance from EPA:

1. Increase Staff Knowledge – EPA provided the following guidance documents for MDEQ to review:
   - May 23, 2000 Henry Nickel letter regarding Detroit Edison (WEPCO),
   - June 13, 1989 guidance on Limiting Potential to Emit in New Source Permitting,
   - September 22, 1987 guidance on Implementation of North County Resource Recovery PSD Remand,
   - November 12, 1997 guidance on Crediting of Maximum Achievable Control Technology (MACT) Emissions Reductions of NSR Netting and Offsets, and
   - Federal Register (FR) Notice on Fugitive Emissions Data. A copy of these documents except the Federal Register Notice on Fugitive Emissions was provided to MDEQ. EPA will mail a copy of the FR Notice on Fugitive Emissions.

2. Routine Maintenance, Repair and Replacement (RMRR) – To date, MDEQ has not made any RMRR decisions, but this may become an issue in the future. MDEQ anticipates developing a permitting section RMRR policy when the need arises and EPA input may be sought when developing the RMRR policy.

3. RACT/BACT/LAER Clearinghouse (RBLC) – MDEQ said the RBLC could be more useful, if source information was entered into the Clearinghouse at the proposed action stage and information updated when the project becomes final. This would alert MDEQ to other actions under consideration at the time of developing a construction permit. Additionally, it was noted that fields for averaging time, test methods, cross links to the permit, and costs would be helpful. MDEQ has noted when calling some of the permitting agencies, the data in the RBLC is not accurate and suggests that more QA/QC be done on the data base. EPA has recently taken comments on the RBLC and the MDEQ comments should be given to the appropriate EPA staff contact.

4. Environmental Justice (EJ) – MDEQ would like to have EPA assistance with EJ issues. Training about EJ issues would be very beneficial. MDEQ currently uses the Montana Environmental Policy Act (MEPA) process to address socio-economic concerns.

5. Training – MDEQ would like EPA to continue to support NSR training. The state has had significant staff turnover and NSR training would help educate the staff and keep existing staff knowledgeable of NSR program implementation

issues. Additionally, MDEQ would like training to cover the issues of specific interest to Montana such as increment, AQRVs, permitting terms and definitions, and aggregation.

6. Permit Comments – MDEQ would like EPA to provide a written response to every permit, including those permits with no comments.

7. Increment Guidance – MDEQ would like EPA guidance on increments.

8. Single Source Stationary Source Determinations – MDEQ is aware that Coal Bed Methane projects may require single source determinations be made and may need information from EPA to assist in making these determinations.

9. Public Outreach on BACT Evaluations – MDEQ said EPA could assist the state by providing citizens training explaining BACT to the public.

Executive Summary BACT Review/EPA Findings

The following areas are those that were identified as BACT specific where the NSR permitting program could be improved:

1. MDEQ should include in all future permitting actions that the BACT analysis be reevaluated if construction has not commenced within 18 months of the permit issuance [40 CFR 52.21(r)(2) and 51.166(j)]. If a PSD source has not yet commenced construction, MDEQ expires the permit and the source would have to reapply to get a new PSD permit.

2. MDEQ needs to explain thoroughly in the Technical Support Document (TSD) [MDEQ uses the term Permit Analysis] the rationale used to make the BACT determination. The TSD should clearly explain:

   - the rationale used to not employ a control technology (infeasibility),
   - cost (including incremental and total cost analysis),
   - the emission limit,
   - the averaging time and why it is appropriate to protect the National Ambient Air Quality Standards (NAAQS) and increment,
   - the selection of appropriate test methods, and
   - the scope of the search of BACT determinations must be national in scope,

3. Language in the PSD permit "equivalent technology" needs to be specified as a specific alternative technology or removed in order to allow for the public to comment. The permit needs to be clear about what technologies are to be employed rather than leaving the permit with language that gives broad discretion

to select an equivalent technology which has not gone through public comment or review.

PURPOSE OF THE PROGRAM REVIEW

Many governmental and non-governmental entities are responsible for ensuring environmental protection throughout the nation. The majority of the environmental programs are carried out through the shared responsibility of EPA an its non-Federal partners.

In Region 8, EPA has approved into the Montana State Implementation Plan (SIP) the rules allowing the state to implement and issue NSR construction permits. EPA maintains the responsibility for overseeing SIP approved programs, monitoring progress toward meeting national environmental goals, and ensuring the Federal regulations and the Clean Air Act are implemented.

One goal of oversight is to strengthen the relationship between EPA and its partners to ensure that the national environmental goals in the EPA Strategic Plan are attained, and to ensure the State is implementing the SIP appropriately. Effective oversight helps to ensure adequate environmental protection through continued development and compliance with the national standards. Oversight also helps to enhance a partner's capabilities to administer sound environmental protection programs through increased communication and a combination of support and evaluation activities. Finally, Federal oversight seeks to describe and analyze the status of national and regional environmental quality, though continued collection and distribution of information from governmental agencies and other major sources. EPA is fully committed to the success of its partners' environmental programs.

Fostering a quality approved program and partnership is not a static activity. Conditions change, and program activities must evolve to respond to new environmental problems and challenges. Consequently, the methods used to oversee approved programs must change over time, depending on the maturity and complexity of national programs and on the capability of EPA's partner.

PROGRAM REVIEW PROCESS AND PROCEDURES

During this NSR program review, EPA performed an evaluation of the NSR construction permitting program which includes the PSD construction permitting program. The scope of the program review focused on the overall NSR program and the application of the BACT to the construction permits issued over the past 5 years. All source permits issued in the past 5 years were reviewed to identify areas for improvement and consistency of permitting practices. The MDEQ has a solid construction permitting program.

The files were extremely well organized, labeled well and very comprehensive. All the construction permits and approvals reviewed by EPA had a technical review document explaining the permit history and the MDEQ decision making process.

As was evident from our interviews and file review, the MDEQ staff is knowledgeable about the air permitting program and makes sound decisions. MDEQ stated that its goal is to protect the public health and environment.

This review was initiated by EPA sending an advanced copy of a list of questions for MDEQ to provide responses. MDEQ cooperatively participated in the program review process. The program review and file review questionnaires had two fundamental purposes: (1) to collect and organize the information regarding the construction permitting program; and (2) to ensure consistency among the states when conducting the program reviews.

The EPA State Permitting contact for the program review coordinated with the MDEQ primary contact person in May 2003, to select a mutually agreeable date for the review. The week of June 23, 2003 was selected as the time of the on-site visit by EPA staff. June 23 through 27, 2003, EPA Region 8 performed an evaluation of the air NSR permitting program. In early June 2003, EPA provided a copy of the NSR program review questionnaire to MDEQ to fill out prior to the on-site visit. MDEQ provided draft responses to the questionnaire prior to the on-site visit and within the time agreed upon. The intent of the NSR permitting program review was to identify any major program deficiencies, to identify commendable practices, and to make recommendations on how to improve the programs.

It took MDEQ approximately 20 hours of staff time to fill out the questionnaire. The questionnaire consisted of questions on general program information and specific areas such as: Netting; Routine Maintenance, Repair and Replacement; Synthetic Minor Limits; Pollution Control Project Exemptions; Fugitive Emissions; Modeling; Stationary Source Determinations; Debottlenecking and Increased Utilization; Relaxation of limits taken to avoid Major NSR; Circumvention and Aggregation Issues; Prevention of Significant Deterioration; BACT; Class I Area Protection for PSD Sources; Additional Impacts (Soils, Vegetation, Visibility and Growth); Preconstruction Monitoring; Increment Tracking; Program Benefits; Non-Attainment NSR; NSR Offsets; LAER Determinations; Alternative Analysis; Compliance of Other Major Sources; Minor NSR Programs, Increment Protection; Control Requirements; Tracking Synthetic Minor NSR Permits; Public Participation and Notification; Environmental Justice; Program Staffing and Training; General NSR Program Issues; and Effective Construction Permits. This questionnaire was used as the basis for discussion during the on-site visit. During the on-site visit, EPA selected all construction permits subject to PSD issued in the past 5 years for a BACT analysis review. The permit review was conducted to ensure the construction permitting program was functioning properly. The EPA review team evaluated 8 source files containing 9 permits. The projects reviewed were permitted between 1999 and 2003. These permits represented all of projects approved during the program review time frame. EPA's goal was to

provide MDEQ

with the final report within 90 days of the completion of the on-site review and finalization of the responses to the questionnaire by MDEQ.

The EPA staff began the on-site review by discussing the schedule for the week, identifying the process of the review, and allowing the MDEQ the opportunity to ask preliminary questions about the review process. Those in attendance were: Mike Sewell, EPA-OAQPS; Catherine Collins and Christopher Ajayi, EPA-Region 8; from MDEQ staff: Dave Klemp, Air Permitting Section Supervisor; Vickie Walsh, Compliance Section Supervisor; Dan Walsh, Environmental Engineer Specialist, Preconstruction Lead Worker; Angelia Haller, Air Modeling; Debbie Skibicki, Environmental Engineer Specialist, Title 5 Lead Worker; and Julie Merkel, Air Quality Specialist.

EPA staff were on-site for five days (two half days and 3 full days). The exit conference consisted of the EPA staff providing verbal preliminary findings and results. MDEQ responded with its comments and made closing remarks.

The EPA staff received the full cooperation and assistance of the MDEQ staff throughout the on-site visit. Supervisors and individual staff members made themselves available, as necessary, to answer questions or to otherwise assist the EPA staff. EPA fully appreciated this assistance and spirit of cooperation. At both the entrance and exit meetings, MDEQ staff emphasized that its goal was to provide the highest level of environmental protection and carefully balance all the issues under consideration in implementing this goal. MDEQ was open to reviewing the recommendations EPA might have as a result of the program review. EPA has raised a number of issues (i.e. director's discretion, modeling, BACT and increment consumption) over the past few years during the routine review of individual construction permits. The program review was a good opportunity to view how these issues have been addressed overall.

ON-SITE VISIT MEETING

The review began with a discussion of the questionnaire during the initial meeting. EPA went over each question in the questionnaire and MDEQ commented on MDEQ's responses. EPA asked follow-up questions or sought clarification, as necessary. EPA provided preliminary findings during the close-out meeting at the end of the NSR program review. MDEQ stated its group worked hard and was very dedicated. MDEQ has been making improvements in its permitting program to produce better permits. MDEQ expressed concern of being one of the first agencies in the nation to have a NSR and Title V program review. MDEQ was concerned because this was the first review and the protocol for the review had not been previously established.

MDEQ ORGANIZATION AND STAFFING

At the time of the review, the MDEQ construction permit program was located in the Air and Waste Management Bureau (now the Air Resources Management Bureau), in the Air Permitting Section. The Air Permitting Section works closely with the Air Compliance Section and Technical Support Section. The Air Permitting Section is generally responsible for construction and operating permitting programs. The construction and operating permitting programs each have its own lead worker.

At the time of the review, MDEQ had a staff of seven permit writers (currently eight permit writers), two project leads, and one program manager. At the time of the review, there was one position vacant that has since been filled. There has been a high turnover of staff in the past five years mainly because of constraints in pay. There are positions in Monitoring/Modeling and Compliance and Enforcement that support or review the construction permits. The permitting and compliance staff share information about sources. The permit staff has a good working knowledge of the complex nature of construction permit requirements. MDEQ has staff members that are developing experience and knowledge in the air permitting program. MDEQ was very helpful during NSR program review.

TRAINING

Some of the permit engineers are new and have required on the job training. The permit staff has received adequate training. The MDEQ employees participate in training based on availability. Additionally, the permitting staff participates in training offered in meetings, permit workshops and on the job training. MDEQ would find it helpful to have training in areas specific to Montana issues, such as training on increment issues.

PRELIMINARY FINDINGS AND CLOSE-OUT MEETING

The preliminary findings and close-out summary meeting was held on June 26, 2003 at the MDEQ offices. Those in attendance were: Don Vidrine, Dave Klemp, Dan Walsh, Vickie Walsh, Debbie Skibicki, Mike Sewall, Catherine Collins, and Christopher Ajayi. Recommendations, as reflected in the Executive Summary, were made on how to improve the construction permitting program and areas where the program has excelled were highlighted. EPA agreed to allow MDEQ the opportunity to review the draft report before it would be issued as a final document.

SUMMARY OF FINDINGS AND CONCLUSIONS

Overall, MDEQ implements a solid construction permitting program and has adequate resources available. The permits that are issued are of a very good quality. MDEQ maintains

an excellent permitting web site. As was evident from our meetings and file review, the staff is knowledgeable about the air permitting program. During the program review, EPA found both program strengths and areas for improvement. It appears MDEQ's construction permitting program is proceeding in the right direction and EPA is encouraged by MDEQ's program. The Montana NSR program has evolved and improved in the past 5 years. The significant findings of the review can be found in the Executive Summary. The comments have been arranged into three groups: areas of major improvement for the review period, areas where improvements can still be made, and areas where EPA can assist the state to strengthen its program.

Construction Permit Activity (1999 to 2003)

MDEQ issued the following NSR construction permits from 1999 to 2003: Graymont Western U.S., Inc.; Plum Creek Manufacturing – Evergreen; AgriTechnology Montana LLC; Rocky Mountain Power; Plum Creek Manufacturing – Columbia Falls; Louisiana-Pacific Corp. – Missoula; Roundup Power Project; Continental Energy Services. MDEQ issued a total of 9 construction permits for both new sources and modifications to existing sources. A summary of the permitting actions are as follows:

3 new major sources
6 major modifications to existing major sources

MDEQ issued 200 non-major permits, three PSD permits, no nonattainment NSR permits in 2002, and one nonattainment NSR permit in 2003. There was one nonattainment NSR permit issued in 1993. EPA's experience with other state permitting programs is that major source permits, and permitting actions at existing major sources, are a small percentage of the total number of construction permits issued each year. New minor sources and modifications to existing minor sources tend to dominate the universe of permitting actions.

According to MDEQ, there are typically one to two major NSR permit to construct applications pending at a time. The average time taken by MDEQ to issue a PSD permit, starting from the time the application was determined complete follows the following time line. A completeness determination is made within 30 days of application receipt. Once an application is complete MDEQ must meet statutory time lines. On average it takes about 4 to 6 months to issue a PSD permit, from application submittal and probably about the same for the nonattainment NSR permit. From initial submittal of an application, a draft permit is generally issued in about seven months.

This processing time is influenced by discussion with the permit applicants and changes to the project design that occur after the initial application submittal. But mostly processing time is impacted by the permitting work load. MDEQ has an unofficial priority system for issuing permits. The highest priority for permit issuance is given to construction permits and then to Title V operating permits.

SUMMARY OF QUESTIONNAIRE FINDINGS

The following information is a detailed summary of MDEQ's responses to the interview and questionnaire used during the program review. A complete copy of the questionnaire is found in Appendix A. Where EPA has had problems or comments on the MDEQ's implementation of the program, EPA has added to MDEQ's response. EPA generally agrees with how MDEQ is implementing the program unless EPA has noted a problem or has made a comment.

PROGRAM REQUIREMENTS COMMON TO BOTH PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AND NONATTAINMENT NEW SOURCE REVIEW (NSR)

Netting

Netting, as approved in the Montana NSR SIP, determines whether modifications at major stationary sources are subject to major NSR. MDEQ's contemporaneous look-back of period five years, is exactly the same as the Federal PSD regulations [40 CFR 52.21]. For determining the baseline from which emission reductions are calculated, MDEQ requires the applicant to submit the actual emissions from the units along with any applicable permit limits. MDEQ only allows reductions from actual emissions. An applicant cannot receive emission reduction credit for reducing any portion of actual emissions that result because the source was operating out of compliance.

MDEQ does not allow an applicant to receive emission reduction credit for an emissions unit that has not been constructed or operated. MDEQ has not had the opportunity to use emission reductions to meet MACT requirements as eligible netting credits, but believes it may be appropriate for these reductions to be used as offsets to the extent the reductions are creditable. EPA is evaluating whether the concept of netting does or does not apply to section 112 sources. It is not relevant to a new source and for a reconstructed source, post-change emissions are not considered to determine applicability (i.e. the PTE of the existing process or production is used to determine applicability). The existing process or unit does not have anything where it can apply netting (see the definition of "reconstruct a major source at 40 CFR 63.41). Any emissions decreases claimed as part of a proposed modification required for all stationary, source-wide, creditable and contemporaneous emissions increases and decreases of the pollutant are included in the major NSR applicability determination. MDEQ requires the applicant to demonstrate any emission reductions have not been relied upon for other purposes when conducting a netting analysis to avoid "double counting" of emissions. MDEQ tracks the emission reductions by identifying the emission reductions in the permit analysis section of the technical support document. MDEQ has a process to track projects that use credits to net out of

major NSR. Netting issues do not occur very frequently in Montana (approximately one netting action per year).

MDEQ requires emissions reductions, such as reductions from unit shutdowns, that are enforceable to be creditable for netting purposes. MDEQ has not, to its recollection (specifically in the last 5 years), had public concerns regarding the netting analysis and the procedures used for any issued permits that avoided major NSR. EPA would have identified any concerns during the individual permit reviews. Interpollutant trading is not allowed when doing a netting analysis, (e.g., a source using NOx or PM credits for netting out of Volatile Organic Chemical (VOC) increases). MDEQ verifies that a source's emissions reductions are creditable and have not already been used by the source, or another source. MDEQ does not have an approved banking program. The emission reductions are tracked in the permit analysis and should any modification or new construction be proposed, then the source would evaluate the availability of offsets. Nonattainment NSR offsets required the applicant to demonstrate that emission reductions used for netting have not been previously used.

PTE Limits, Netting, and PSD Avoidance

MDEQ's limits on potential to emit (PTE), established for the purposes of keeping sources or modifications out of major NSR, are well written, with adequate monitoring, record keeping and reporting requirements. PTE limits are consistent with EPA's guidance for practical enforceability and effectively limit the PTE of sources and modifications to less than the major source threshold. MDEQ regularly sends synthetic minor permits to EPA and EPA in its oversight role reviews a portion of these permitting actions and makes comments as necessary.

Routine Maintenance, Repair, and Replacement (RMRR)

MDEQ did not have knowledge of the EPA letter dated May 23, 2000, to Henry Nickel of Hunton & Williams, concerning Detroit Edison and the Wisconsin Electric Power Company (WEPCO) case. EPA provided this document during the program review. MDEQ will consider this document, in the future, should RMRR become an issue. MDEQ has not had to make any formal RMRR determinations in the last 5 years. Therefore, no documentation of formal RMRR exemption determinations have been produced. In the future, MDEQ would consider any determinations described at the various NSR trainings, determinations submitted by an applicant, previous policies, and court cases in making RMRR determinations.

MDEQ does not have a formal protocol for making RMRR exemption determinations. There is no formal protocol because MDEQ has not been asked to make RMRR determinations. If a request were made, MDEQ would ask the applicant to provide a demonstration of what the proposed RMRR is and to provide any supporting documentation. MDEQ would review the submitted information and any other available information to make its determination. If the determination were difficult, MDEQ would ask for assistance from EPA Region 8. If RMRR issues become commonplace, MDEQ would most likely develop a "guidance" document for the air permitting section.

The NSR permitting staff receives on the job PSD training, and training at EPA sanctioned courses. This training addresses the RMRR exemption evaluations. MDEQ has not provided an information outreach program on RMRR exemption evaluations for owners of regulated sources, but MDEQ would provide this training, if requested. MDEQ would like training on RMRR, especially on any new RMRR rule that may be developed.

Synthetic Minor Limits

MDEQ does not keep a list of synthetic minor sources (i.e., sources that would otherwise be major for NSR but are considered minor because of emissions limits or other limiting conditions in the permit). The only such list is maintained for Title V synthetic minor purposes. MDEQ will consider adding a flag to the Montana air permitting database to start tracking synthetic minor NSR sources. In the near future, the permit library will be located on MDEQ's web site for the public and/or EPA to access.

MDEQ's formal process for establishing a synthetic minor source is completed at the time the permit is issued. Sources submitting an application typically request a limitation to keep it below the NSR thresholds. If the source doesn't request a limitation MDEQ will contact the source and ask if it would prefer to accept a limit to keep it below NSR thresholds or if it wants to be subject to NSR review. Synthetic minor sources include enforceable permit limits, such as production limits, fuel consumption limits, and control technology requirements, to keep the source as a minor source. Rolling 12-month limits are used, as appropriate, to ensure the limits are enforceable as a practical matter. Compliance with the synthetic minor limits are tracked over time by the facility. Typically the facility submits information demonstrating compliance with the emission limits. At a minimum this emission information is submitted annually and is used in developing an annual emission inventory. If the limitation is such that the time period for demonstrating compliance needs to be shorter, then more frequent reporting is required. The permit writers have the compliance staff (facility inspectors) review and verify the facility's compliance with all applicable emission limitations.

MDEQ is satisfied the current tracking activities are sufficient to ensure sources getting synthetic minor permits to avoid major NSR review are not actually operating above the applicable major source threshold(s). Between MDEQ inspections and the reporting requirements for the facilities, MDEQ is confident the synthetic minor sources are staying minor or would be identified as exceeding the synthetic minor status. Synthetic minor permits contain conditions requiring sources to notify MDEQ if and when the major source threshold is reached. If a source is operating at the major source threshold then the source is out of compliance with its permit limits and MDEQ has sufficient compliance tools (record keeping, inspections, source tests, etc.) in place to identify non-compliance. There have been instances where the facility has notified MDEQ that it has exceeded the permit limits. The annual reports, source compliance inspection and public review of the source help to ensure that synthetic minor sources are truly

staying a synthetic minor source. If a source were to violate the synthetic minor permit limits, MDEQ would perform a case-by-case evaluation to determine if the source was capable of staying within the permit limits and the violation occurred because of operator error or if the source has no ability to comply the permit limits and would need to undergo a PSD review.

MDEQ performs or requires modeling for sources seeking synthetic minor permits to determine impacts on PSD increments and NAAQS, if the increment analysis is applicable (i.e. baseline being triggered). Additionally, MDEQ has internal guidance documents that identify when modeling is required. MDEQ should provide any internal guidance documents on modeling for EPA review (subsequent to the review it is now available on the MDEQ website). MDEQ's published guidance is consistent with 40 CFR 51, Appendix W.

According to Montana's rule, visibility impacts are assessed when a major source or major modification of a major source occurs. Visibility issues in Class I areas have not been considered in the past, when reviewing synthetic minor applications. However, in the future, visibility considerations for minor sources could be factored into the permitting process (e.g. BACT analysis/determination), as allowed by the definition of BACT.

Pollution Control Projects (PCP) Exclusion

MDEQ follows EPA's guidance on PCP exemptions from NSR. To the best of MDEQ's recollection, MDEQ has not granted any PCP exclusions for "feed" or "fuel" switches. The closest example identified is a change to cleaner fuels. MDEQ has generally required these type of activities to be permitted, rather than flagging the activity as a PCP. MDEQ would ask the applicant to provide a demonstration of the project's "environmental benefit" and not just "economic efficiency." MDEQ would review the demonstration and would seek concurrence from EPA Region 8. A modeling analysis or some other quantitative analysis could be used to evaluate collateral emission increases or a qualitative analysis could also be used to demonstrate insignificant impacts from emission increases. Hazardous Air Pollutant (HAP) collateral increases will be treated in the same way. Emission reduction credits from PCP are available for netting or NSR offsets. To the extent such decreases are made federally enforceable and are creditable (not relied upon for compliance with the SIP or enforcement actions), MDEQ believes actual emission decreases would be available to be used as offsets. The only PCP request in recent history was from a kraft pulp mill and involved the use of a regenerative thermal oxidizer that was part of a MACT requirement. Montana's NSR SIP does not include the PCP exclusion for electric utility steam generating units (WEPCO exclusion).

Fugitive Emissions

MDEQ's regulatory definition of "fugitive" emissions for major NSR applicability purposes is "those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening." MDEQ makes a distinction between "fugitive" emissions and "uncontrolled" emissions. Uncontrolled emissions are those emissions that do

not pass through a control device or are not affected by a controlling agent or work practice.

Uncontrolled emissions could be considered either "fugitive" or "point" sources of emissions depending on the type of source.

Fugitive emissions in major NSR applicability determinations for new or modified sources are considered, only to the extent fugitive emissions are required to be considered, such as for the 28 listed source categories. For existing sources that are not one of the 28 "listed" source categories, Montana does not include fugitives in the need for permit determination section. MDEQ allows major sources to use reductions in fugitive emissions for netting purposes. If MDEQ believes there are actual emission reductions and it can be demonstrated there is a net air quality benefit, the baseline that is used is the "actual emissions" as required by MDEQ's rules. MDEQ's guidelines or calculation methodology used to quantify fugitive emissions is varied because there are a wide variety of fugitive emission types. In general, MDEQ prefers to use EPA emission factors (i.e., AP-42) whenever appropriate. In addition, MDEQ may use other resources, such as professional judgment based on similar sources. MDEQ's permits contain conditions for specific emission limits or control methods/work practice standards for fugitive emissions consistent with requirements for BACT.

During the review, it was found that MDEQ needed to review the Federal Register on how to count fugitive emissions for NSR permitting. Currently, MDEQ does not consider fugitives in the applicability determination for NSR/PSD for non-listed source categories. MDEQ will continue to count fugitive emissions for the 28 listed categories. Montana's rule will not need to be changed as it already includes provisions for fugitive emissions.

Modeling

MDEQ follows EPA's modeling guidelines in 40 CFR Part 51 Appendix W. MDEQ has a written agency-specific air quality modeling guidance for use by applicants. The air quality modeling guidance is titled "Montana Modeling Guidelines for Air Quality Permits" and is available through the Montana DEQ homepage on the web-site. EPA has performed an initial review of the modeling guide and found that it was appropriate. The modeling guidance is not approved in state regulations or through the SIP. MDEQ asks the applicant to submit a modeling protocol for approval prior to submitting the modeling. Although the modeling protocol is not required, it is highly recommended. Obtaining Department approval before the modeling is submitted is beneficial to both the applicant and MDEQ. Deviations from the modeling guidelines in Appendix W are subjected to public comment to the same extent that all applications submitted to MDEQ are subject to public comment and are submitted to the regional EPA office for approval. EPA's regulations allow for deviations from Appendix W so long as EPA approves the deviations according to Appendix W, Section 3.2.2.a. If there is any deviation from standard modeling procedures, MDEQ requests protocols be submitted. The modeling protocol is provided to other interested organizations (e.g., EPA, Federal Land Manager (FLM), if it is submitted and the other interested parties are required to receive it, such

as a modeling protocol for a permit action subject to NSR. In addition, all information that is submitted to MDEQ (that is not deemed confidential) is part of the public record and is open for public inspection. Such information is provided to interested parties as requested. MDEQ reviews the modeling submittals to determine if the option switches are correct.

Proposed new and modified minor permit actions are evaluated to determine if modeling for the NAAQS and PSD increments is needed (as mentioned earlier, MDEQ should provide the internal guidance document to identify when modeling is required). In the recent permit applications, modeling for NAAQS has been performed. Any minor source required to obtain a permit that locates in a "triggered (baseline date)" area would be required to demonstrate compliance with any applicable increment. The effect of downwash is modeled if stacks are less than good engineering practice (GEP). Montana puts the building dimensions into the model to consider the effect of downwash, if the stack is less than GEP. MDEQ properly accounts for GEP stack height if the stack is taller than GEP, with the exception of the Montana Sulphur and Chemical Company case where EPA believes that GEP was not appropriately addressed. The most recent years available are typically used for off-site meteorological data. MDEQ may request readily available preprocessed representative meteorological data of the area be used in the modeling analysis.

Modeling staff are trained on the job, and by attending other pertinent and available training (e.g. Bee-Line, Westar, Earth Tech, etc.). MDEQ follows "The Air Quality Analysis, Additional Impacts Analysis, and Class I Area Impact Analysis" guidance provided in the New Source Review Workshop Manual (Draft October 1990). The cumulative NAAQS and PSD increment compliance assessment is performed by using the appropriate emission inventories of other sources. Sources are required to compile these inventories and typically rely on MDEQ's database containing the other facility's emissions. MDEQ confirms the assessment was completed correctly. MDEQ identifies emission sources by conducting site visits, traveling to the area, using maps, or using other generally available information. MDEQ eliminates emission sources if the source would not cause or contribute emissions to the area in question. PSD increment consuming/expanding sources are identified and tracked during the permitting of the major source that triggered the minor source baseline date. Any future sources moving into an area would be tracked by MDEQ, along with their emissions. MDEQ has a map of the increment areas by pollutant.

EPA and MDEQ disagree on what constitutes baseline areas. EPA's position on Montana's baseline areas is based on the regulatory definitions found at 40 CFR 52.21(b)(15)(i) and 51.166(b)(15)(i), and as specified 40 CFR 81.327 (see Appendix C for correspondence and details). EPA uses the following dates as the minor source baseline date for the "rest or state" for SO_2 and PM_{10} as March 26, 1979 and April 1, 1979, respectively. EPA uses February 10, 1990 as the minor source baseline date for the "entire state" for NO_x (see August 6, 1998 letter in Appendix C). MDEQ uses the statutory definition of baseline area and has been consistently applying this definition in the State of Montana. This disagreement of baseline area could affect what other nearby sources would need to be modeled in PSD permit increment modeling. In

reviewing recent PSD permit applications this has not been an issue because the proposed new sources were not very close to existing sources where a cumulative increment modeling analysis would be necessary. Mobile sources are modeled for increment compliance to the extent they consume increment. For further information, please see the additional discussion in the Increment Tracking Procedures and EPA finding later in this report.

A cumulative analysis of the NAAQS using allowable emissions from existing sources would be used along with the projected allowable emissions of the source seeking the permit. For a cumulative increment analysis the actual emissions from existing sources would be used, if they were available (if unavailable allowable emissions could be used), along with the projected allowable emissions of the source seeking the permit.

MDEQ ensures the controlling concentrations reported by the applicant for each pollutant and averaging period were appropriately determined during the review of the information submitted in the application. The impact modeling analyses are reviewed to ensure accuracy and completeness, and appropriate modeling procedures (e.g., modeled to 100-m resolution, fence line and not property line, nearest modeled receptors, etc.) were followed. Complex terrain is an issue in Montana. The appropriate model is required and the terrain (receptor files) are reviewed by MDEQ to ensure the proper spacing was used to accurately reflect the terrain and ensure that peak concentrations are modeled. Furthermore, "hot spot" modeling is conducted. Pollutants without NAAQS and/or PSD increments are addressed in the air quality impact assessments. These types of pollutants may be addressed in a more qualitative manner. MDEQ generally relies on what is requested by the FLMs. The threshold concentrations would depend on the pollutant in question. EPA has reviewed MDEQ's modeling practices and found that there are no areas of concerns. In the future, EPA will be conducting a detailed survey and evaluation of the modeling program.

Appropriateness of an application's proposed meteorological data is determined according to the guidance set forth in MDEQ guideline–Appendix E. "On-site" meteorological data requirements are determined on a case-by-case basis, but are required primarily when the data are available or when there are no representative data available. Every effort is made to ensure the data are validated and 90% is accepted. However, a case-by-case determination may be made and the "on-site" data may be supplemented with representative data.

The applicant is required to demonstrate it does not cause or contribute to the violation, when an applicant's air quality modeling reveals NAAQS and/or PSD increment violations. The violations would be addressed by dealing with the source(s) causing or contributing to the violation. In general, a 2% level is used by the MDEQ in determining the significance of an impact on PSD increments at Class II and I areas. This 2% significance level has a basis in the table 40 CFR 51, Appendix S, Section III (for example, the 3-hour SO_2 value of 25 $\mu g/m^3$ is approximately 2% of the 1300 $\mu g/m^3$, the 3-hour SO_2 NAAQS), and is used by MDEQ when permitting proposed new major stationary source and major modifications in PSD areas that would impact a nonattainment area. The 2% of PSD increments level is below the 4%

significance level for permitting new major stationary sources and major modifications that would impact an existing exceedance of a PSD Class I increment, which was proposed in a rulemaking by EPA in 1996 that was never finalized. Neither EPA nor MDEQ has formally adopted significance levels for Class I areas, and EPA has made no formal decision as to whether MDEQ's significant impact levels are appropriate. As a matter of policy, EPA uses the value specified in 40 CFR 51.165(b)(2) and 40 CFR 51, Appendix S, Section III as significance levels for Class II PSD areas.

MDEQ's definition of ambient air means that "portion of the atmosphere, external to buildings, to which the general public has access." MDEQ has suggested receptor spacing in Montana's Modeling Guideline. However, it is up to the applicant to determine the receptor spacing. MDEQ would ensure the "hot-spot" receptor spacing is not more than 100 meters or is less for very complex terrain. If verified monitoring data is absent in the area of concern, MDEQ has default values of background air quality data that are representative and that are used for areas where no other significant sources exist. These background values may be used in conjunction with modeling sources located in the area to determine appropriate background values. MDEQ uses the same North American Datum (NAD) for stack, receptor, and building UTM coordinates.

Stationary Source Determinations

Montana's SIP-approved rules define a stationary source differently than 40 CFR 51.165 or 51.166. MDEQ's definition contains an exclusion for HAPs, except to the extent that such HAPs are regulated as constituents of more general pollutants listed in section 7408(a)(1) of the Clean Air Act (CAA).

MDEQ uses EPA policy and guidance to determine if emitting units are under common ownership/control or are considered separate sources. Distance between emitting units is one of the factors considered in making a source determination. MDEQ considers the potential for the source(s) to affect the same airshed. EPA does not use distance as a sole criteria for determining a single source. MDEQ assesses a source(s)' financial, personnel, and contractual relationships to determine common ownership or control. Frequently, companies will show business/contract information (process descriptions, contractual information, or obligations) to MDEQ during a meeting and keep the information instead of leaving a copy with MDEQ. MDEQ assesses whether sources with different first two-digit SIC codes (i.e., emissions units not in the same industrial grouping) can qualify as a single or separate stationary source. EPA could request that business information be shared with EPA should the need arise. EPA has guidance on what constitutes a single source. EPA encourages MDEQ to review EPA's policies on single source determinations.

Debottlenecking and Increased Utilization

When determining if a proposed modification is subject to major NSR, MDEQ includes

emissions increases from existing emissions units that are not physically modified (i.e., debottlenecked units or units with increased utilization). MDEQ looks at actual and potential emission increases and any relevant guidance to determine how the regulations affect the debottlenecked unit and to determine if there is an emissions increase from the emission units. Permitting staff are trained through on-the-job training and by attending relevant training courses. The training includes considering emissions increases when determining if a modification is major for NSR.

Relaxation of Limits Taken To Avoid Major NSR

MDEQ has knowledge of the "relaxation" regulatory provisions of 40 CFR 51.165(a)(5)(ii), 51.166(r)(2), and 52.21(r)(4). In general, if a source becomes a major source because a limitation (previously placed on the source to keep it from being subject to NSR) was relaxed, then certain provisions of NSR apply to the source or modification as if it were a new source and construction had not yet commenced. The types of changes MDEQ appropriately considers as potentially subject to a relaxation assessment are the relaxation of limitations on production, hours of operation, control technology requirements, or process limits. MDEQ does not have a written policy on relaxation assessments. MDEQ has not made any relaxation assessments in the last five years. If any time changes are made to an existing major source, MDEQ would ensure the source is not relaxing a condition without complying with the appropriate requirements. MDEQ includes specific permit limits and conditions to make potential future relaxation possibilities more identifiable. If during this change the source relaxes a condition meant to keep it out of NSR, the source would be subject to certain provisions of NSR as if it had not yet begun construction. Relaxation evaluation training is provided to NSR permitting staff employees in EPA approved training courses and through on-the-job training.

Specific references on limitations and a thorough discussion in the permit analysis help to clarify future relaxation possibilities (e.g. a minor source becoming a major source). MDEQ's understanding (and EPA agrees with the appropriate circumstances under which an existing minor source is allowed a 100/250-tons-per-year emissions increase without triggering the relaxation provision) is if a minor source undertakes a physical or operational change and the change is in and of itself considered major, then the source is subject to NSR.

A relaxation could result in NSR implications and doesn't relieve a source from the obligations under NSR. Regulatory changes are not considered a "modification" and therefore, NSR would not be triggered.

Circumvention/Aggregation Issues

The State considers whether to aggregate prior minor emissions increases at the stationary source when reviewing a modification to determine if the permitting action is major for NSR. Aggregating is only considered if netting is part of the action or if MDEQ believes the

modification should be considered with previous changes. MDEQ uses the following criteria to determine if a series of minor modifications or projects need to be aggregated for NSR applicability purposes. MDEQ looks at the previous modifications, on a case-by-case basis, to determine if the modifications should be considered as part of the same project. Subsequent projects at the same facility would be subject to the same case-by-case scrutiny. When requests are made to permit new or modified emissions units as separate minor changes over time, MDEQ evaluates whether the permitting process is purposely staged as minor permit changes when the changes are really one permitting action subject to major NSR. Furthermore, Montana's de minimis rule prohibits projects from being artificially split up to avoid further permitting.

Prevention of Significant Deterioration (PSD) Program Benefits

As part of the program review, the permitting agency was asked what it thought were the benefits of the PSD program. In MDEQ's opinion, the following are the PSD program benefits:

1. An incentive to reduce emissions below major source levels. Industry appears to be quite interested in avoiding PSD.

2. PSD permits have been used as the authority to implement other priorities such as toxic emission reductions and improved monitoring and reporting.

3. The case-by-case nature of a PSD permit allows for the MDEQ to implement emission reducing programs or controls more quickly than through rule making.

4. The PSD program provides communities a mechanism to be involved in improving air quality. In Montana, communities can be involved in both major source and minor source permitting. Since Montana has changed the public comment period for PSD review to be at least as stringent as EPA's rule, the public has more notice and opportunity to comment.

5. The PSD program has contributed to sustaining good air quality.

Best Available Control Technology (BACT)

EPA strongly encourages and recommends that permitting authorities use the "top-down" BACT approach as outlined in the Draft October 1990 "New Source Review Workshop Manual: Prevention of Significant Deterioration and Nonattainment Area Permitting."

MDEQ does not "require" permit applicants to use the "top-down" method for

determining BACT. MDEQ does not have rules to require "top-down" be used, but MDEQ certainly recommends using the "top-down" approach. In general, most major and minor sources use the "top-down" BACT approach. MDEQ commonly uses information resources in addition to the RACT/BACT/LAER Clearinghouse to identify emission control options, costs, test methods or averaging times. The most useful information comes from other states, EPA, or FLMs. For example, the FLMs have shared "pending" PSD emission limits with MDEQ in the recent past. The applicants and vendors can also provide information. The usefulness of the information depends on the specific project being discussed. Although vendor information is useful, it is generally more difficult to obtain. MDEQ, when appropriate, considers combinations of controls when identifying and ranking BACT options (e.g., low organic solvent coatings plus thermal oxidation). MDEQ tries to look at practical control option combinations, not every combination (theoretical options that have never been used). EPA expects that the permitting agency look at all potential control options and evaluate whether the control option is viable, as MDEQ currently does. When appropriate, MDEQ regroups the emission units included in a cost evaluation. For example, if an applicant's approach is to evaluate the cost of controlling each unit separately, MDEQ considers combining units for control by one control device or conversely, if an applicant combines all units for control by one control device and concludes this approach is too expensive, MDEQ will consider controlling points in different combinations.

MDEQ provides detailed documentation and explanations of the draft BACT determinations in the public record. Additionally, in the public record for draft BACT determinations, MDEQ provides an economic rationale if a BACT option is rejected as being prohibitively expensive. MDEQ uses uncontrolled emissions to calculate baseline emission rates for calculation of cost effectiveness values. These are emissions that would be present without the benefit of controls or procedures for reducing emissions.

MDEQ's PSD permits specify emissions limits and control methods consistent with the basis and capabilities of the selected BACT options. MDEQ looks at other states' requirements regarding averaging time. The basis for the compliance averaging time for BACT emission limits is found in the RBLC, New Source Performance Standards (NAPS), ambient standard basis averaging time or other information available. MDEQ uses these averaging times to establish the BACT averaging times. In addition, MDEQ ensures that the averaging times selected are protective of the short-term NAAQS and increments. MDEQ makes sure that permit conditions impose restrictions consistent with BACT evaluation assumptions (i.e. if the annual emissions used in a BACT cost evaluation are based on an assumption of less than continuous operation and/or operation at less than maximum capacity).

MDEQ may consider deviations from EPA's recommended cost evaluation procedures, if the applicant can make a demonstration it is appropriate to deviate. Primary reliance for the BACT cost evaluations is placed on total cost effectiveness values and a comparative cost approach. MDEQ has an "approximate bright line" test for the cost of BACT (e.g. $/ton of

pollutant), but a cost comparative approach is the primary driver for the establishment of BACT. MDEQ may try to obtain costs/basis for projects outside its permitting jurisdiction, as appropriate. EPA encourages MDEQ to continue to review the cost basis for projects outside the permitting authorities jurisdiction. When considering the cost approach, MDEQ tries to be consistent among the different pollutants. However, HAPs, VOC, and Carbon Monoxide (CO) are generally treated slightly differently. Environmental impact from these pollutants might be different and may lead to different costs for BACT and are therefore considered on a case-by-case basis. If MDEQ believes it necessary, it will conduct a BACT cost evaluation independent of the cost evaluation provided by the applicant. Cost estimates are required to be referenced to a common base year (e.g., 1998) so that cost estimates can be easily compared. Other agencies (e.g. State, EPA for FLM) are contacted to determine if their cost estimates need to be normalized before comparisons can be made. If MDEQ relies on costs from other agencies, it would make sure the comparisons were appropriate.

MDEQ performs a BACT assessment for all new or modified emissions units or activities emitting a pollutant subject to PSD review no matter how small the emissions from an affected unit or activity. Under the NSR program, all pollutants emitted in a significant amount are subject to BACT. Increases or decreases in corollary toxic/hazardous air pollutants are not usually considered as part of a BACT evaluation. However, such pollutants could be factored into the BACT analysis as part of collateral environmental impacts, if appropriate.

BACT evaluation training is provided to NSR permitting staff. MDEQ's staff attend EPA sanctioned training on NSR, which includes BACT, and attend other available training, as resources allows. Also, staff are trained on the job. BACT evaluation refresher training will be provided to the experienced NSR permitting staff when available. BACT-specific training recently became available and MDEQ will send staff to this training as time and resources allow. An information outreach program on BACT evaluations for owners of regulated sources or the public has not been provided, but would be provided if requested. Each major NSR BACT determination is entered into the RACT/BACT/LAER Clearinghouse. Before establishing BACT as work practice, design, or operational standards, MDEQ determines if emissions limits (e.g., lbs/mmBTU, lbs/hr) are unfeasible. MDEQ tries to factor what is feasible and appropriate. MDEQ applies BACT to fugitive emissions.

BACT Review/EPA Findings

The following are areas for improving the BACT analysis of the NSR permitting program:

1. MDEQ should continue to require in all future NSR permitting actions that the BACT analysis be reevaluated if construction has not been commenced within 18 months of permit issuance [40 CFR 52.21(r)(2) and 51.166(j)]. {Permits issued since the Rocky Mountain Power --Hardin Generator permit have included this language.}

2. MDEQ should continue to explain thoroughly the rationale used to make the BACT determination, as required in the Draft 1990 NSR Manual. The explanation should clearly explain in detail:

   - control technology infeasibility {A good example of a control technology rationale is found in the Graymont Western permit.},
   - cost (including incremental and total cost analysis) {A good example of a cost analysis is found in the Plum Creek - Columbia Falls VOC section of the permit.},
   - consideration of BACT determinations from around the country {Permits issued, including the Rocky Mountain Power – Hardin permit, have included an expanded national search of BACT through the RBLC and FLM database, etc.},
   - emission limit(s) {A good example of an emission limit explanation is found in the Rocky Mountain Power Hardin permit.},
   - averaging time(s) (appropriate to protect the NAAQS and increments) {A good example of an averaging time is found in the Roundup permit.}, and
   - selection of appropriate test method(s) {A good example of a test method explanation is found in the Roundup permit.}.

3. Language in the PSD permit "equivalent technology" needs to be specified as a specific alternative or removed in order to allow the public the ability to know what is being permitted and to be able to provide comment on the permitted project. The permit needs to be clear and specific about what technologies are to be employed rather than leaving the permit with language that gives broad discretion to select an equivalent technology which has not gone through public comment or review.

The NSR program review did not evaluate redefining the source to include the examination of other technologies such as IGCC, etc. At the time of the review, there was a case (Thoroughbred) that outcome should determine whether redefinition of a source should be

included in the BACT analysis. At the current time, the courts have not ruled on this case.

EPA's Expectations for BACT Determinations

EPA reviewed MDEQ BACT determinations and found some areas that could be improved. A review of the BACT determinations found that MDEQ addressed all of the areas for BACT review, however MDEQ could bolster the documentation of the BACT explanation. MDEQ uses the NSR guidance, however the following are EPA's expectations for how the state should make BACT determinations:

1. EPA encourages MDEQ to continuing making BACT determinations in accordance with the principles outlined in the NSR Workshop manual.

2. EPA encourages MDEQ to continue to use the top down method and properly compare control alternatives. (If the permitting authority uses a method other than top down, the method is explicitly documented and appropriately considers energy, environmental and economic impacts).

3. EPA encourages MDEQ to more clearly document references and resources used to develop the list of control options.

4. EPA encourages MDEQ to have more detailed and complete documentation (in the Technical Support Document (TSD)) sufficient to determine that controls are technically infeasible and that demonstrates that the technical difficulties would preclude the successful use of the control option for the pollutant-specific emission unit under review.

5. EPA encourages MDEQ to provide more detailed cost/economic impact analysis (in the TSD) sufficient to demonstrate that the analysis is accurate, reasonable and consistent with the EPA Control Cost Manual.

6. EPA encourages MDEQ to more clearly describe the BACT decision criteria (in the TSD) and the rationale for the BACT determination.

7. EPA encourages MDEQ to continue to promptly enter all BACT determinations into EPA's RACT/BACT/LAER Clearinghouse.

Class I Area Protection For PSD Sources

MDEQ relies heavily on the FLMs to determine the maximum distance they are

comfortable with, when a proposed project needs a Class I impacts analysis, including consideration of distance of the source from Class I areas (e.g., maximum distance criteria). Otherwise, MDEQ's policy is that every Class I area within a 200 km radius of the source is analyzed. The Class I impact analysis includes an Air Quality Related Values (AQRV) analysis (i.e. visibility, soils and vegetation, etc). MDEQ considers, as required by the rules, any source to be a significant new or modified source if it is located within 10 kilometers and has any impacts greater than 1 $\mu g/m^3$. This source must submit an impact analysis for all pollutants. Applicants are required to submit a Class I increment analysis for each pollutant subject to PSD review for which an increment exists. Applicants are required to identify and provide a cumulative impact analysis (maximum impact within Class I areas) for all Class I areas impacted by the source, specifically for increment. For AQRVs, MEPA requires that a disclosure of cumulative impacts be completed, with the extent of analysis depending on the size of the source, distance, etc. EPA encourages the state to formalize and obtain EPA approval for significance levels for Class I analysis (see the paragraph discussing the Class I significant impact levels under the Modeling section) . MDEQ believes that it would be appropriate for EPA to formalize the use of significant impact levels to ensure consistency.

The rules require MDEQ to send all application materials to the FLMs for review and comment. MDEQ's permitting procedures do not require the applicants to notify the FLM. However, during pre-application meetings, MDEQ strongly suggests the applicants involve the FLMs. Generally there is a very high level of communication, consultation, and discussion between MDEQ and FLMs, and there is a high level of communication between the applicant and FLMs. MDEQ actively seeks input from FLMs during the permitting process. The applicant is required to address potential adverse impacts on AQRVs identified by the FLM during the notification process. MDEQ does not require prior approval of Class I area impact analysis procedures that the applicant plans to use. MDEQ highly recommends that applicants obtain prior approval, but it is not required. MDEQ requires applicants, as appropriate, to perform a visibility analysis for Class I areas. The applicant, as appropriate, is required to address potential effects on scenic vistas associated with Class I areas identified by the FLM during the notification process. MDEQ does not have a formal process for handling Class I area increment violations if predicted, but if this issue arises, Montana would address it. MDEQ has not issued PSD permits where the FLM objected.

Additional Impacts -Soils, Vegetation, Visibility, and Growth

MDEQ's PSD application forms do not specifically require information regarding additional impacts. However, information regarding soils, vegetation, visibility, and growth may be collected as part of the MEPA process. MDEQ requires applicants to submit the necessary analysis even though it may not be specifically identified on the application. MDEQ uses any information available or submitted with the application in researching additional impacts. MDEQ also relies heavily on the appropriate FLM when reviewing any impact analysis. EJ issues are included in the analysis to the extent that the MEPA document identifies

them. Recently an FLM made an adverse impact analysis on a draft permit issued by MDEQ; however, this analysis was later withdrawn by the FLM. Arguments that the protection of the NAAQS will assure protection of vegetation may be considered, however, this issue has not been raised in recent history. MDEQ requires predicted short-term impacts (e.g, one hour NOx impacts) be used to assess impacts on vegetation for pollutants which do not have short term ambient standards. MDEQ requires assessments for vistas (e.g., parks, airports) near the proposed source or modification, as appropriate.

Preconstruction Monitoring

MDEQ has formal preconstruction monitoring requirements. The rules describe when preconstruction monitoring is required. MDEQ has a formal public participation process regarding requirements for preconstruction monitoring for specific proposed projects. This is part of the normal permit review process and permit issuance. The applicant is required to notice the submittal of the application in the newspaper. In addition, MDEQ completes a public notice with the draft permit or Environmental Impact Statement (EIS). MDEQ consults with the FLM regarding preconstruction monitoring requirements for a proposed source or modification. MDEQ does not have a formal process during preconstruction monitoring for resolving conflicts between the FLM and the applicant. Any process used would be more informal. However, if a permit decision is challenged to the Board of Environmental Review (BER), the hearing process would be formal.

MDEQ, in the last five years, has required an applicant applying for a PSD permit to conduct preconstruction ambient monitoring or meteorological monitoring. MDEQ has a formal approval/denial process at the conclusion of preconstruction monitoring. MDEQ does not routinely provide ambient monitoring data in lieu of requiring applicants to perform preconstruction monitoring. There are instances where MDEQ has used existing monitoring data and determined this data is appropriate to satisfy the preconstruction monitoring requirements. MDEQ follows EPA guidance (e.g., siting, equipment, data validation, audits) regarding collection of preconstruction monitoring data. Post construction ambient monitoring would be required as a condition of a PSD permit when MDEQ determines it is necessary to determine the effect the source's emissions have on the air quality of an area. MDEQ uses an internal guidance document (Appendix B) to help determine the appropriateness of post-construction monitoring.

Increment Tracking Procedures

MDEQ and EPA disagree on when the baseline dates have been triggered and the definition of the baseline areas. MDEQ does not assume that the minor source baseline has been triggered for all of the pollutants statewide. Rather, MDEQ uses the definition of baseline

area to determine where to track increment. EPA has sent MDEQ letters in the past regarding the baseline dates and areas (see Appendix C). Since there hasn't been much growth in Montana this hasn't been an issue, but it could become a problem if sources in Montana grow. EPA's position is that the "rest of state," as specified in 40 CFR 81.327, baseline areas have a minor source date for SO_2 and PM_{10} as March 26, 1979 and April 1, 1979, respectively, and "entire state," as specified in 40 CFR 81.327, baseline area for NO_x has a minor source date of February 10, 1990. The definition of "baseline areas" is found at 40 CFR 52.21(b)(15)(i) and 51.166. (b)(15)(i).

MDEQ uses the date that the 1 $\mu g/m^3$ baseline area is defined to assign baseline dates. MDEQ has maps for NO_x, SO_2, and PM_{10} identifying these minor source baseline dates for each area. MDEQ has an understanding of receptor location dependence versus source location dependence for increment tracking. At this point, the program is informal because very few, if any, new sources have moved into the areas of concern.

MDEQ maintains and updates a computerized emission source database for increment tracking that includes minor sources that affect the increment. The database includes the information needed for modeling (e.g., source locations, stack parameters, emissions). Actual emissions would be used for existing sources consuming increment while allowable would be used for those sources not yet permitted or in operation. There could be many different ways for determining the emissions for each averaging period, either emission factor-type information, actual source test data, emissions data from Continuous Emission Monitoring Systems (CEMS), etc. Area sources are included in increment tracking analyses, (e.g., growth-related and transportation-related emissions). Increment consumption is evaluated, primarily when a new application is submitted because there is very little growth in Montana. If a person from the public were reviewing the emission database and had some previous knowledge, they could clearly identify the sources included in an emission source inventory used for PSD modeling analysis (e.g., name, location, stack parameters) and the sources excluded in a modeling analysis.

MDEQ would work with other states or jurisdictions to obtain the necessary data to handle interstate increment tracking (for state reviewing authorities) or interjurisdiction tracking (for local reviewing authorities), including consistency of tracking across jurisdiction boundaries. MDEQ does not have a set procedure to plan and incorporate new modeling tools. MDEQ would review the new modeling tools to determine appropriateness and consult with other authorities, as necessary. Increment tracking training is not provided to NSR permitting staff. At the time of the review, there was be a workshop regarding this issue to be held in the fall which Montana attended.

Increment Tracking Procedures/EPA Findings

EPA has indicated in the past that the State has been administering its PSD increment

program different than what EPA believes is allowed by the State and Federal PSD rules and 40 CFR 81.327. Specifically, EPA believes that the only baseline areas in Montana are those that are codified as attainment or unclassifable in 40 CFR 81.327. To create areas different than those identified in 40 CFR 81.327 EPA believes the State would need to submit a request under section 107(d) of the Act with appropriate documentation. EPA sent several letters to MDEQ discussing this issue (Appendix C).

On June 25, 2002, the State made a request under section 107(d) to redesignate the "rest of state" area identifications for SO_2, PM_{10}, and NO_x in an effort to settle this disagreement with EPA. The submittal requested that the 40 CFR Part 81 be amended by dividing the State into approximately 4,000 separate baseline areas for air quality planning purposes. The State later requested that we hold off on acting on the submittal because of the ongoing efforts by states and EPA regarding redesignations. Until EPA approves new baseline area requests under 107(d) of the Act, the PSD baseline areas that EPA recognizes are those that are currently codified as attainment or unclassifiable in 40 CFR 81.327.

Endangered Species Act (ESA)

Notification of PSD applicants of their ESA obligation is not applicable to Montana sources. The Montana Environmental Protection Act (MEPA) has obligations to consider endangered species effects before a permit is issued. However, neither Montana Rules nor the EPA PSD rules require an evaluation of effects on endangered species.

Nonattainment NSR Program Benefits

During the program review the permitting agency was asked to identify the benefits of the Nonattainment NSR program. In MDEQ's opinion the following are the Nonattainment NSR program benefits:

1. The nonattainment NSR program provides an incentive to reduce emissions below major source levels.

2. Nonattainment NSR permits provide the authority to implement other priorities such as toxic emission reduction and improved monitoring and reporting.

3. The case-by-case nature of a nonattainment NSR permit allows MDEQ to implement emission-reducing programs or controls more quickly than through rulemaking.

4. The nonattainment NSR program provides communities with a mechanism to be involved in improving their own air quality.

5. The nonattainment NSR requirements have contributed to reducing emissions or avoiding emissions increases in nonattainment areas.

NSR Offsets

MDEQ does not have an emissions "bank" for offsets. Should there be appropriate reductions, MDEQ accounts for these in its attainment demonstration in the permitting analysis. MDEQ makes sure there is no double counting for attainment or offsets. Emission reductions from different nonattainment area(s) are not allowed to be used as NSR offsets, unless there are impacts from one source on multiple nonattainment areas or unless otherwise allowed under the CAA. MDEQ would look at the amount by which actual emissions are being reduced to be able to quantify the amount of reductions available and determine the baseline. Copies of permits are required as part of the permit application to determine if the reductions from other sources being proposed as NSR offsets are federally enforceable. Records for determining actual emissions are available for review at MDEQ.

MDEQ first requires the applicant to make a demonstration and then MDEQ reviews all available resources to determine the appropriateness of the reductions to verify that the reductions proposed for NSR offsets are "surplus" to other Act requirements and are "real" (i.e., reductions in emissions that were actually emitted into the air). Additionally, MDEQ ensures that reductions were not used in previously issued permits.

Interpollutant trading is not allowed for NSR offsets. MDEQ allows credits used for netting to be used as nonattainment NSR offsets, if it can be demonstrated there is a reduction in actual emissions, and there will be a net air quality benefit. MDEQ requires offset ratios of 1:1 or greater for nonattainment NSR which are as stringent as the offsets required by the CAA. MDEQ requires applicants proposing to use NSR offsets to include a "net air quality benefit" modeling analysis as part of their permit application. A positive net air quality benefit analysis is required; however, the specific information required to be submitted is not identified in the rules.

LAER Determinations

MDEQ does not require permit applicants to use a top-down approach to determine the most stringent control option available for LAER. The top down approach is not required by the rules; however, this approach would be highly recommended by MDEQ to determine LAER. MDEQ requires a permit applicant to identify all available control options. The applicant must

also identify control options as being: (a) achieved in practice, (b) contained within the SIP of any other state or local reviewing authority {as described in the LAER definition contained at ARM 17.8.901(10)}, and (c) technologically feasible. Cost effectiveness is not considered because it is not a component of the LAER analysis. MDEQ uses other information sources in addition to the RACT/BACT/LAER Clearinghouse, including information from states, EPA, or FLMs to identify control options. MDEQ also uses vendor or any other available information. The usefulness of the information would depend on the specific project being discussed. If MDEQ did not agree with the content of the applicant's analysis, MDEQ may conduct its own independent LAER analysis. MDEQ submits its LAER determinations to EPA's RACT/BACT/LAER Clearinghouse. MDEQ considers technology transfer in its LAER determinations.

MDEQ provides detailed documentation or explanations of proposed LAER determinations in the TSD or public record. MDEQ considers combinations of controls when identifying and ranking LAER options, as appropriate. MDEQ performs a LAER assessment for all new/modified emission units or activities emitting a nonattainment pollutant subject to major NSR review no matter how small the emissions from an affected unit or activity. The LAER analysis would require that LAER be determined at the time of permit issuance (e.g. if LAER would change during the permit writing process, then the analysis would need to be redone so that LAER would be up to date at the time of permit issuance). MDEQ's permits contain conditions requiring specific emission limits, control method conditions or work practice standards consistent with the basis and capabilities of the selected LAER option. Compliance averaging times for LAER emission limits are established depending on the nonattainment area and the analysis conducted as part of a permit application. MDEQ's permits contain conditions requiring emissions testing, monitoring, record keeping, and reporting so that inspectors and enforcement personnel can easily determine compliance with LAER requirements.

MDEQ ensures permit conditions impose restrictions consistent with the LAER determination. The public would have an opportunity to comment on the application as well as any permit that was issued for a source, including the LAER determination. MDEQ reviews all public comments and incorporates those changes MDEQ believes are appropriate.

LAER evaluation training is provided to new NSR permitting staff. MDEQ staff receive EPA sanctioned training on NSR and on-the-job training. LAER evaluation refresher training has not been provided to experienced NSR permitting staff. An information outreach program on LAER evaluations for owners or operators of regulated sources or the general public would be provided, if requested.

Alternatives Analysis

Each nonattainment NSR permit action addresses the alternatives analysis as required by

section 173(a)(5) of the CAA. This information is required in the application as well. The alternatives analysis is a specific requirement of Montana's nonattainment NSR rules. MDEQ would develop criteria (not a rule), to address the depth of analysis required for a specific project when the need arises. Project-specific EJ issues raised as part of this analysis are included in the permit action. MDEQ follows the procedure as described in Section 173(a)(5) of the CAA. These issues are described in the MEPA compliance document (generally an Environmental Assessment (EA)) created with each permit action and requires public input. MDEQ does not know of any projects where the analysis resulted in changes to the proposed projects.

Compliance of Other Major Sources in the State

MDEQ requires the permit applicant to demonstrate and certify that all major stationary sources owned or operated by the applicant in Montana are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable emission limitations and standards [ARM 17.8.905(1)(b)]. MDEQ requires an analysis of a statewide compliance demonstration as part of its review of the permit application. There are no specific criteria identified to be used by the applicant in this demonstration as there may be a variety a methods and criteria available.

MINOR NSR PROGRAMS

NAAQS/Increment Protection

Modeling is used, if necessary, to assure minor sources and minor modifications will not violate the NAAQS. Air quality monitoring is required as part of a permit condition if the results of the modeling analysis shows it is necessary. For the pollutants with PSD increments, MDEQ has a list of areas (with UTM coordinates) where the minor source baseline date has been triggered. EPA disagrees with this approach because EPA interprets the minor source baseline dates having been triggered for the entire state and/or rest of state as discussed in the Increment Tracking Procedures section of this review (see Appendix C). The information is contained on a tracking map (the list and the map would be made available upon request to MDEQ). Minor sources are modeled, as appropriate, for PSD increments if the minor source baseline date is triggered. MDEQ has procedures in place to identify minor sources that consume or expand PSD increment. The public can access a list of sources that affect PSD increments by requesting it from MDEQ. Any information MDEQ has in its files or database are available for inspection by the public.

Control Requirements

The State of Montana has BACT requirements for all sources requiring an air quality permit. MDEQ has monitoring or reporting requirements for minor sources requiring a permit,

as necessary. The application or permitting process requires modeling for minor sources, as necessary. Minor sources with Federally applicable permit limits for MACT, NAPS, or National Emission Standards for Hazardous Air Pollutants (NESHAP) are required to report compliance.

Tracking Synthetic Minor NSR Permits

MDEQ does not maintain a specific list of sources that have taken the synthetic minor limits to avoid PSD. Such a list has been created for sources that have taken synthetic minor limits to avoid Title V operating permits, but MDEQ does not have an established procedure for tracking synthetic minor construction permits. MDEQ does not include "prompt deviation" reporting requirements in synthetic minor source permits. However, similar information is gathered through the normal recordkeeping requirements of the permit. The source must notify MDEQ when emission limits are exceeded, malfunctions occur and must submit annual emission data and emission inventory data which is used to determine compliance with synthetic minor permit limits. The requirements (e.g., PSD, nonattainment NSR, Title V, NESHAP) to keep a source minor are clearly identified in the permit applications MDEQ reviews, and the permits issued.

De minimis Rule/EPA Findings

EPA has expressed concerns in the past regarding the State's de minimis provisions (see Appendix D for letters). This rule, as well as EPA rules, allow for existing air pollution sources to make certain modifications without having to obtain a preconstruciton permit. EPA is concerned that the rule could allow sources to violate major source preconstruction permitting requirements, as well as the SIP, however, the de minimis rule has a provision that states it does not apply to any major modification at a major source. The de minimis rule also contains provisions that do not allow a source to violate any applicable requirements. On May 28, 2003, the State submitted a SIP revision revising and reformatting subchapter 7 of the Administrative Rules of Montana. Included in that SIP was the de minimis permitting rules. EPA will decide whether or not it can approve the de minimis rule when we propose action on the SIP submittal.

PUBLIC PARTICIPATION AND NOTIFICATION

MDEQ changed its rule to allow for a 30 day public notice for major NSR permits. This provides the same public comment period as in the EPA rules. Montana previously had a 15 day public comment period, which did not provide the public with the same amount of time to make public comments as would have been allowed under EPA's rule. However, EPA approved the earlier rules into Montana's SIP as allowed by 40 CFR 51.166.

Notification of all major NSR permits (new nonattainment NSR, PSD and major modifications) issued by MDEQ are published in a newspaper of general circulation to inform

the public of the draft permit decision. MDEQ has a procedure for notifying the public when major NSR permit applications are received. The applicant is required, by rule, to publish a public notice as part of the permit application submittal. The draft permit is saved to MDEQ's web site upon issuance and is sent to interested parties upon request. Synthetic minor, netting, and minor permits are not publicly noticed by MDEQ. In addition, all permit decisions are placed on MDEQ's web site upon issuance.

MDEQ has developed a mailing list of interested parties for NSR permit actions (e.g., public officials, concerned environmentalists, and citizens). The list is application-specific and members of the public need to notify MDEQ of their interest to be placed on the list. Other means for public notification are the web site, e-mails (used frequently), telephone, radio and television interviews, and conversations with interested persons. The public notices clearly state when the public comment period begins and ends. MDEQ believes the most effective ways to provide public notice are the web site and using all of the other media available (TV, radio, newspaper). Public notices are not provided in languages other than English, unless requested. MDEQ has been asked by the public to legally extend a public comment period. Only in certain instances can MDEQ extend the public comment period, so most requests are rejected. MDEQ extended the comment period for projects subject to an EIS and for projects subject to the incinerator provisions.

EPA is concerned with the Montana statute that requires the state make a decision within 60 days (currently 75 days for major NSR permits) from the date of completeness. While there are no minimum time frames by which states must make a decision, EPA believes that the 60 day (now 75 day) time frame may not give adequate time to address any significant comments made. However, sources may request 30 day extensions to the due date for making decisions.

MDEQ notes that if an EIS is prepared there is a minimum of 120 days to make a decision, as determined by Montana statute.

The approximate percentage of draft major NSR permits revised due to public comments definitely depends on the type of source. Excluding comments from the applicant, at least 50% of the permits generally are revised for some reason based on comments from others. Based upon the last several years of permitting experience, public participation seems to be increasing. If a draft permit is revised, MDEQ considers whether the changes clearly exceed the scope of the application or if the public could not have reasonably anticipated the change, to determine if the permit should be reissued in draft.

MDEQ provides the opportunity for a "public hearing" as part of the NSR permitting process. Public hearings are noticed in the same way as applications and permits (i.e. newspaper, web site, radio) and generally the Board of Environmental Review (BER) tries to provide as much notice as possible (30 days, if possible). The public needs to notify BER of its interest and the public is directed to where the permit related information may be obtained (such

as permit applications, draft permits, deviation reports, monitoring reports). MDEQ has a web site for the public to get permit related documents. Currently the draft or final air permits are on the web site along with the analysis for each permit and the MEPA analysis. Information is generally added or updated on the web daily, as permits are sent out.

Training has not been provided to citizens by MDEQ on public participation or on NSR. Training would be provided if requested. MDEQ sends the application material as well as draft and final permits to affected states and tribes. Affected states and tribes are notified about how to participate in the permit process should they choose to do so. Public notices for PSD permits specifically state the amount of increment consumed. Public notices for PSD permits are sent to each party as identified in 40 CFR 51.166(q)(2)(iv).

WEB SITE

MDEQ has developed an excellent web site that provides real-time permitting information to the public. The web site serves many purposes: to help sources determine what permits they need to get; to provide a comprehensive means for public involvement; and to begin developing an archive for permitting actions. The air permits air program web site has:

- permit application forms and instructions, a calendar page with public notices on proposed permits and proposed regulations, permit guidance and final permits with links to air permit staff,
- permit process flow diagrams,
- air permits staff page with hot links to individual permit staff,
- permit application forms with a comprehensive set of permit application directions,
- air permits public comment calendar page with links to the public notice, technical analysis and draft permit for each proposed construction or operating permit,
- complete copies of recent final issued permits,
- links to MDEQ regulations and rule-making actions, and
- links to EPA policy and guidance databases and applicability determinations.

Overall, the MDEQ air permits program web site is a comprehensive resource for both the permit applicants and the general public.

ENVIRONMENTAL JUSTICE (EJ)

MDEQ considers EJ issues during the permitting process. EJ issues are considered to the extent that MEPA prescribes the state look at social and cumulative effects. MDEQ conducts a MEPA analysis for every air quality permit decision that constitutes a state action under MEPA. MDEQ conducts alternative analysis as part of its nonattainment area permitting process according to Section 173(a)(5) of the CAA. There are no EJ criteria or guidelines developed for this analysis by MDEQ, beyond the requirements of MEPA and Section 173(a) of the CAA.

MDEQ's NSR permitting program and public comment process for PSD regulated pollutants provides for consideration of alternatives, as allowed by Section 165(a)(2) and MEPA. Generally, the demographics of an area are factored into the MEPA document. Cumulative effects are addressed in the MEPA analysis and in the demonstration of compliance with the Montana Ambient Air Quality Standards (MAAQS), NAAQS, and increment.

Additional community information and/or demographics (e.g. children, the elderly) are considered important for an EJ analysis and are identified through the MEPA process.

Public involvement during an EJ analysis is allowed. Stakeholder groups request to be involved or submit comments regarding MDEQ's draft decision. Generally, stakeholders can get involved upon initial submittal of the permit application. Any comments from the application submittal are appropriately considered. The substance of the comments determines the degree to which the stakeholders or community will be involved in the permit decision process. Those interested can have great influence on the permit decision, as allowed by law. Depending on the situation, the easiest way to know of stakeholder involvement is to review comments submitted and talk with the specific permit reviewer for a particular source. All of the information submitted to MDEQ is public information and available for public inspection, unless confidential under Montana law. MDEQ staff are available to answer questions and explain permit information. MDEQ decisions are detailed further in the permit analysis.

MDEQ considers direct and indirect benefits, and burdens from the proposed actions. MDEQ describes the social and economic, as well as the physical and biological impacts of a project in the MEPA document. The EJ analysis considers comparative and disproportionate impacts. This is determined on a case-by-case and criteria-by-criteria basis. MDEQ attempts to identify such impacts by requiring the applicant to identify social/economic and physical/biological impacts. MDEQ uses this information in conjunction with MDEQ research to identify impacts.

PROGRAM STAFFING AND TRAINING ISSUES

The total Full Time Equivalent (FTE) dedicated to NSR permitting, compliance and modeling is approximately ten(100. The permitting staff are responsible for minor NSR permitting, major NSR permitting, and Title V permitting. The approximate NSR program breakdown of the staff (including compliance) into the different job functions is as follows: 5 engineers, 4 permitting specialists, 1 modeler, 8 compliance specialists, 1 clerical, 2 supervisors, 1 monitoring, 1 data management, 1 enforcement. Primarily, the staff are trained by existing senior staff and supervisors who have program experience. The staff tries to attend as many NSR trainings and conference calls, as possible. MDEQ uses EPA's draft NSR Manual for training and other training material made available through EPA or other trainers. EPA needs to provide more NSR training, especially advanced training and training specific to NSR Reform. Specific NSR training for Montana and BACT training would also be beneficial. MDEQ does not provide formal NSR program training opportunities for the public, or regulated community, but would provide training, if requested to do so.

GENERAL NSR PROGRAM ISSUES

MDEQ implements EPA issued program guidance and policies for NSR. MDEQ mainly learns about federal NSR rule changes through involvement with WESTAR or STAPPA or by consulting EPA's web site. The staff reviews the source of emission factors and determines if the emission factors are appropriate to use. Staff may review other information sources such as information from other states, EPA, FLMs, or vendors to determine the appropriateness of any emission factor.

MDEQ maintains excellent files and administrative records for its construction permits and adheres to all applicable state administrative requirements. MDEQ does a good job ensuring applications are complete.

MDEQ has the following suggestion for the NSR program. The NSR program and the rules implementing the program should be reviewed and made clearer instead of EPA adopting so much guidance to interpret the program. In addition, MDEQ sees there is a real problem of consistency across EPA regions and even within EPA regions.

MDEQ permitted 200 non-major permits, three PSD permits, and no nonattainment NSR permits last year. There was one nonattainment NSR permit issued in 2003. The average time (months) taken by MDEQ to issue a PSD permit, starting from the time the application was determined complete follows this time line. A completeness determination is made within 30 days of application receipt. Once an application is complete MDEQ must meet statutory time

lines. On average it takes about four to six months (from initial submittal) to issue a PSD permit and probably about the same for an nonattainment NSR permit.

EPA is concerned with the Montana statute that requires the state to issue an NSR permit within 60 days (currently 75 days for major NSR permits) from the date of completeness. While there are no minimum time frames by which states must make a decision, EPA believes that the 60 day (now 75 day) time frame may not give adequate time to address any significant comments made. However, sources may request 30 day extensions to the due date for making decisions. MDEQ notes that if an EIS is prepared there is a minimum of 120 days to make a decision, as determined by Montana statute.

MDEQ has a formal procedure for establishing past permit violations related to NSR requirements, including applicable BACT or LAER requirements, and for dealing with "self reported" NSR violations.

PM_{10} condensible emissions are included in the total amount of PM_{10} emissions when determining PSD applicability, BACT, PSD increment, and NAAQS. When PM_{10} testing is required, MDEQ includes a permit condition that requires testing and specifies testing methods for PM_{10} condensibles, if appropriate depending on the form and the basis of the limit.

EFFECTIVE CONSTRUCTION PERMITS

MDEQ's construction permits: (1) identify each emissions unit regulated; (2) establish emissions standards or other operational limits, including appropriate averaging times for numeric limits; (3) include specific methods for determining compliance and excess emissions, including reporting, record keeping, monitoring, and testing requirements; (4) outline procedures necessary to maintain continuous compliance with emission limits; (5) establish specific, clear, concise, and enforceable permit conditions; and (6) include conditions necessary for a source to avoid otherwise applicable requirements (e.g., keeping a modification "minor").

APPENDIX A
NEW SOURCE REVIEW (NSR) PROGRAM REVIEW QUESTIONNAIRE
MAY 14, 2003

New Source Review (NSR) Program Review Questionnaire
May 14, 2003

Note: This questionnaire does not address implementation of changes made to the major NSR rules in EPA's rulemaking on December 31, 2002.

I. Program Requirements Common to Both Prevention of Significant Deterioration (PSD) and Nonattainment NSR

A. Netting

Y ☐ N ☐ 1. Is netting approved in your NSR SIP for determining whether modifications at major stationary sources are subject to major NSR (PSD or nonattainment NSR as applicable)? If no, please explain.

Yes

Y ☐ N ☐ 2. Is your contemporaneous look-back period five years, exactly the same as in the Federal PSD regulations at 40 CFR 52.21. If not, what is the contemporaneous time period for netting in your SIP?

Yes

Y ☐ N ☐ 3. For determining the baseline from which emission reductions are calculated do you require the applicant to submit the actual emissions from the units along with any permit limits that apply?

Yes

Y ☐ N ☐ 4. Do you allow an applicant to receive emission reduction netting credit for reducing allowable emissions instead of actual emissions? If yes, please explain.

No, we only allow reductions from actual emissions.

Y ☐ N ☐ 5. Do you allow an applicant to receive emission reduction credit for reducing any portion of actual emissions that resulted because the source was operating out of compliance?

No

Y ☐ N ☐ 6. Do you allow an applicant to receive emission reduction credit for an emissions unit that has not been constructed or operated?

No

Y ☐ N ☐ 7. Are emissions reductions to meet MACT requirements eligible for netting credits? If yes, under what conditions? (See EPA's November 12, 1997 memo from John Seitz entitled "Crediting of Maximum Achievable Control Technology (MACT) Emission Reductions for New Source Review (NSR) Netting and Offsets".)

The Department has not had the opportunity to do this yet but believes it is appropriate for these reductions to be used as offsets to the extent they are creditable.

Y ☐ N ☐ 8. When any emissions decreases are claimed as part of a proposed modification, do you require that all stationary, source-wide, creditable and contemporaneous emissions increases and decreases of the pollutant be included in the major NSR applicability determination?

Yes

9. To avoid "double counting" of emissions reductions what process do you use to determine if emissions reductions considered for netting have already been relied on in issuing a major NSR permit for the source?

The Department requires the applicant to demonstrate that any emission reductions have not been relied upon when conducting a netting analysis. The Department also tracks these by identifying the emission reductions in its permit analysis associated with each change to the permit.

Y ☐ N ☐ 10. Do you have a process to track projects that use credits to net out of major NSR? If yes, please explain.

Yes, but nothing beyond the individual permitting analysis associated with each change to each permit. This issue does not occur very frequently in Montana (≈ 1 per year).

Y ☐ N ☐ 11. Do you require that emissions reductions (e.g., reductions from unit shutdowns) must be

enforceable to be creditable for netting?

Yes

Y ☐ N ☐ 12. Have you had public concerns regarding the netting analysis and procedures used for any issued permits that avoided major NSR? If yes, please describe.

No, not to our recollection, specifically in the last 5 years.

Y ☐ N ☐ 13. Do you allow interpollutant trading when netting, e.g., can a source use NOx or PM credits for netting out of VOC increases? If yes, please explain.

No

14. What process do you have to verify that a source's emissions reductions considered for netting, including emissions reductions that may have been "banked," are not already used by the source, or another source, as nonattainment NSR offsets? Please describe.

The Department requires the applicant to demonstrate that emission reductions used for netting have not been previously relied upon. The Department also updates the analysis portion of each permit to identify which emissions, if any have been reduced and why.

B. Routine Maintenance, Repair, and Replacement (RMRR)

Y ☐ N ☐ 1. Do you have knowledge of the EPA letter dated May 23, 2000, to Henry Nickel of Hunton & Williams concerning Detroit Edison and the Wisconsin Electric Power Company (WEPCO) case RMRR documents?

No. Montana has not needed to make any Routine Maintenance Replacement or Repair (RMRR) determinations in the past. However, Montana will consider this letter in the future should RMRR become an issue.

2. What other documents do you rely upon when making RMRR exemption determinations?

Any determinations that are given at the various NSR trainings or that may be submitted by an applicant. Also, previous policy, court cases, etc. would be used form RMRR determinations.

Y ☐ N ☐ 3. Do you have a formal protocol for making RMRR exemption determinations? If yes, describe the protocol.

The protocol isn't very formal because we haven't been asked to make a lot of these determinations in recent history. We would ask the applicant to provide a demonstration that what they are proposing is RMRR and provide any supporting documentation that they have. We would then review this and any other information that was available to make our determination. If the determination was difficult, we would ask for assistance from EPA Region VIII. If RMRR issues become common, we would likely develop "guidance" for the section to follow.

4. Approximately how many formal RMRR exemption determinations have you made in the last five years? Using any one such determination as an example, describe the example, state the conclusion you reached, and discuss how you reached the conclusion.

None, to our recollection.

Y ☐ N ☐ 5. Do you keep documentation of formal RMRR exemption determinations?

We haven't made any in recent history.

Y ☐ N ☐ 6. Do you restrict the RMRR exemption to units being modified and exclude replacement of entire units from RMRR exemption consideration?

See response to question 5.

Y ☐ N ☐ 7. Regarding the "purpose" evaluation factor in an RMRR exemption evaluation, do you exclude projects from the RMRR exemption that result in an increase in production capacity?

See response to question 5.

8. Regarding the "frequency" evaluation factor in an RMRR exemption evaluation, do you consider just the history of the specific unit(s) in question, just the history of other similar units at the same facility, just the history of similar units at other facilities in the same industry, or some combination of these histories?

See response to question 5.

9. Regarding the "cost" evaluation factor in an RMRR exemption evaluation, what procedure do you follow to take cost into account?

See response to question 5.

Y ☐ N ☐ 10. Do you provide RMRR exemption evaluation training to NSR permitting staff employees (other than on-the-job training)? If yes, describe the nature of the training provided.

The Department staff receives PSD training on the job as well as from EPA sanctioned courses.

Y ☐ N ☐ 11. Do you provide an information outreach program on RMRR exemption evaluations for owners of regulated sources? If yes, how frequently do you provide such information and how do you provide it?

No, but we would if we were requested to do so.

C. Synthetic Minor Limits

Y ☐ N ☐ 1. Do you keep a list of synthetic minor sources (i.e., sources that would otherwise be major for NSR but are considered minor because of emissions limits or other limiting conditions in their permits) that is available for review by the public and EPA? If yes, please explain how.

No, the only such list that we maintain right now is for Title V purposes. However, we will consider adding a flag to our database to start tracking such sources. In addition, in the near future, our permit library will be located on the Department's web site for the public and/or EPA to review permits for sources.

2. Describe your formal process for establishing or designating a synthetic minor source.

This is completed at the time the permit is issued. Sources submitting an application typically request a limitation to keep them below NSR thresholds. If they don't, the Department contacts them and asks them if they prefer to accept a limit to keep them below NSR thresholds or if they want to be subject to NSR review.

Y ☐ N ☐ 3. For synthetic minor sources do your permits include enforceable limits to keep the sources minor?

Yes. Enforceable limits such as production limits, fuel consumption limits, and control technology requirements have been added to permits to keep the sources minor. Rolling 12-month limits are used as appropriate to ensure that the limits are enforceable as a practical matter.

4. How is compliance with the synthetic minor limits tracked over time? Please explain.

Typically the facility must submit information demonstrating compliance with their limits on an annual basis, at a minimum, because this information is also used in developing an annual emission inventory. If the limitation is such that the time period for demonstrating compliance needs to be shorter, then more frequent reporting is required. The Department also has compliance staff that inspect the facilities and ensure that they are in compliance with all applicable limitations.

Y ☐ N ☐ 5. Are you satisfied that your tracking activities are sufficient to ensure that sources getting synthetic minor permits to avoid major NSR review are not actually operating above the applicable major source threshold?

Yes. Between the Department inspections and the reporting requirements for the facilities, the Department is confident that the synthetic minor sources are staying minor or would be identified as exceeding their synthetic minor status.

Y ☐ N ☐ 6. Do you include in your synthetic minor permits conditions requiring sources to notify you if and when the major source threshold is reached?

Yes. If a source is operating at the major source threshold then the source is out of compliance with their limits and the Department has sufficient compliance tools (record keeping, inspections, source tests, etc.) in place to identify non-compliance. There have been instances where the facilities have notified the Department that they have exceeded their permit limits.

Y ☐ N ☐ 7. Do you perform (or require) modeling for sources seeking synthetic minor permits to determine impacts on PSD increments?

Yes, if the increment analysis is applicable. Additionally, the

Department has internal guidance documents that also direct when modeling is required.

Y ☐ N ☐ 8. Do you consider visibility issues in Class I areas, if applicable, when reviewing synthetic minor applications?

No, not in the past. However, in the future, visibility considerations for minor sources could be factored into the permitting process (BACT analysis/determination, for example). In addition, by rule, visibility impacts need to be assessed by the major source or major modification of a major source as well.

D. Pollution Control Projects (PCP) Exclusion

Y ☐ N ☐ 1. Do you have standard permitting procedures or rules that allow for certain changes at non-utility emissions units to be designated as PCP, which are excluded from major NSR?

We follow EPA's guidance on PCP exemptions from NSR.

2. How many PCP exclusions have been granted for "feed" or "fuel" switches?

None to the best of our recollection (especially in the last 5 years). The closest example we can identify is a change to cleaner fuels. However, Montana has generally required that these type of activities be permitted, rather than flagging the activity as a PCP.

3. What process do you use to determine if the project is "environmentally beneficial" and not just "economically efficient"?

We would ask the applicant to provide this demonstration and then we would review it. We would then seek concurrence from EPA Region VIII.

4. How are the collateral emission increases evaluated? Do you require a modeling analysis to demonstrate insignificant impacts from emissions increases?

A modeling analysis or some other quantitative analysis could be used, but a qualitative analysis could also be used.

5. How do you handle collateral increases in

hazardous air pollutants (HAP)?
See response to question #4.

Y ☐ N ☐ 6. Are the emission reduction credits from PCP available for netting or NSR offsets? Please explain.
Yes, to the extent such decreases are made federally enforceable and they are creditable and have not been relied upon for compliance with the SIP, enforcement actions, etc.. We believe they (actual emission decreases) would be available to be used as offsets.

7. Which add-on control devices are most frequently involved in PCP exclusion requests?
The only PCP request in recent history involved the use of a regenerative thermal oxidizer that was part of a MACT requirement.

8. Which types of industrial sources typically request PCP exclusions from major NSR?
The only PCP request in recent history was from a kraft pulp mill.

Y ☐ N ☐ 9. Does your NSR SIP include the PCP exclusion for electric utility steam generating units (often referred to as the WEPCO exclusion)?
No

E. Fugitive Emissions

1. Please provide your regulatory definition of "fugitive" emissions for major NSR applicability purposes.
Those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

Y ☐ N ☐ 2. Do you make a distinction between "fugitive" emissions and "uncontrolled" emissions? If so, please explain.
Yes, uncontrolled emissions are those emissions that do not pass through a control device or are not affected by a controlling agent or work practice. Uncontrolled emissions could be considered either "fugitive" or "point" sources of emissions depending on the type of source.

Y ☐ N ☐ 3. Do you include fugitive emissions in major NSR applicability determinations for new sources? For modified sources? Please explain.

Only to the extent fugitive emissions are required to be considered, such as for listed sources (28 source categories). For existing sources that are not "listed," Montana does not include fugitives in the need for permit determination.

Y ☐ N ☐ 4. Do you allow major sources to use reductions in fugitive emissions for netting purposes? If so, please explain, and describe how you determine the fugitive emissions "baseline" used for netting.

Yes, if the Department believes that there are actual emission reductions and it can be demonstrated that there is a net air quality benefit. The baseline that is used is the "actual emissions" which is in the Department's rules.

5. Please provide a description of your guidelines or calculation methodology used to quantify fugitive emissions.

This is a very broad question because there are a wide variety of fugitive emission types. In general, the Department prefers to use EPA emission factors (such as AP-42)whenever appropriate to do so. In addition, the Department may use other resources, such as professional judgment based on similar sources.

Y ☐ N ☐ 6. Do your permits contain conditions for specific emission limits or control methods/work practice standards for fugitive emissions consistent with requirements for BACT?

Yes

F. Modeling

Y ☐ N ☐ 1. Do you follow EPA's modeling guidelines in 40 CFR Part 51 Appendix W?

Yes

Y ☐ N ☐ 2. Are deviations from the modeling guidelines in Appendix W subjected to public comment and submitted to the regional EPA office for approval?

Yes, to the extent all applications submitted to the Department are subject to public comment.

Y ☐ N ☐ 3. Are minor permit actions (i.e., proposed new and modified minor sources), evaluated to determine if modeling for PSD increments is needed? Under what circumstances is increment modeling triggered for these minor permit actions?

Yes, any minor source that is required to obtain a permit that is either major or minor that locates in a "triggered (baseline date)" area would be required to demonstrate compliance with any applicable increment.

Y ☐ N ☐ 4. Do you ask applicants to submit a modeling protocol for approval prior to submitting modeling?

Yes, if there is any deviation from standard modeling procedures the Department requests protocols be submitted. Although the modeling protocol is not required, it is highly recommended. Obtaining Department approval before modeling submittal is beneficial to both the applicant and the Department.

Y ☐ N ☐ 5. Is the protocol provided to other interested organizations (e.g., EPA, Federal Land Manager)?

Yes, if it is submitted and the other interested parties are required to receive it, such as a modeling protocol for a permit action subject to NSR. In addition, all information that is submitted to the Department (that is not deemed confidential) is part of the public record and open for public inspection. Such information is provided to interested parties as requested.

Y ☐ N ☐ 6. Is the effect of downwash modeled if stacks are less than good engineering practice (GEP)?

Yes

Y ☐ N ☐ 7. Are modeling analyses available for public review?

Yes, any information submitted to the Department (that is not deemed confidential) is available for public review, including modeling and supporting information.

Y ☐ N ☐ 8. Do you review modeling submittals to determine if option switches are correct?

Yes

Y ☐ N ☐ 9. When off-site meteorological data are used what years are typically used?

The most recent years that are available are typically used.

The Department may also request that readily available preprocessed meteorological data that is representative of the area also be used in the analysis.

10. How do you train your modeling staff?

On the job training as well as any other training that is pertinent and available, such as Bee-Line, Westar, Earth Tech, etc.

Y ☐ N ☐ 11. Do you follow The Air Quality Analysis, Additional Impacts Analysis, and Class I Area Impact Analysis guidance provided in the New Source Review Workshop Manual (Draft October 1990)?

Yes

12. For cumulative national ambient air quality standards (NAAQS) and PSD increment compliance assessment:

a. How are the appropriate emission inventories of other sources developed?

Sources are required to compile these inventories and they typically rely on the Department's database that contains emissions from facilities. The Department then confirms that is was completed correctly.

b. What are the reasons used to identify and/or eliminate emission sources?

If an emission source would not cause or contribute emissions to the area in question, they could be eliminated. Sources are identified by traveling to the area, using maps, or other generally available information.

c. How are PSD increment consuming/expanding sources identified and tracked?

Most of these would typically be identified during the permitting of the major source that triggered the minor source baseline date. Any future sources moving into this area would also be tracked by the Department, as well as their emissions. In addition, the Department has a map of the increment areas by pollutant.

d. Are mobile sources modeled for increment compliance?

Yes, to the extent they consume increment.

13. What is the basis (e.g., allowable, maximum or average actual short-term emissions, last two year period, etc.) of the emission rates provided in the NAAQS and PSD increment consuming inventories of other sources?

For a cumulative analysis for the NAAQS allowable emissions from existing sources would be used along with the projected allowable emissions of the source seeking the permit. For a cumulative increment analysis the actual emissions from existing sources would be used if they were available (if unavailable allowable emissions could be used) along with the projected allowable emissions of the source seeking the permit.

14. How do you ensure that the controlling concentrations reported by the applicant for each pollutant and averaging period were appropriately determined?

The Department does this during the review of the information submitted in the application.

Y ☐ N ☐ 15. Are the impact modeling analyses reviewed to ensure that they are accurate and complete, and that appropriate modeling procedures (e.g., modeled to 100-m resolution, fence line and not property line, nearest modeled receptors, etc.) were followed?

Yes

Y ☐ N ☐ 16. Is complex terrain an issue in your region? What modeling procedures are used to address impacts in complex terrain?

Yes, the appropriate model is required and the terrain (receptor files) are reviewed by the Department to ensure that the proper spacing was used to accurately reflect the terrain and ensure that peak concentrations are modeled. Furthermore, "hot spot" modeling is conducted.

Y ☐ N ☐ 17. Are pollutants without NAAQS and/or PSD increments addressed in the air quality impact assessments? What threshold concentrations (e.g., acceptable ambient concentrations) are used to evaluate impacts?

Yes, these types of pollutants may be addressed in a more qualitative manner. The Department would generally rely on what is requested by the FLMs. The threshold concentrations would likely depend on the pollutant in question.

Y ☐ N ☐ 18. Do you have written agency-specific air quality modeling guidance for use by applicants? If yes, has the guidance been provided to other concerned organizations (e.g., regional EPA, appropriate FLM, etc.) for review and comment? Is your guidance available on the internet?

Yes, it is available on the internet.

19. How do you determine the appropriateness of proposed meteorological data for an application? When are "on-site" meteorological data required for an application? Are "on-site" meteorological data validated and accepted if recovery is less than 90 percent?

Appropriateness is determined according to the guidance set forth in the Department guideline (Appendix E). "On-site" meteorological data requirements are made on a case-by-case basis but are required primarily when the data is available or when there is no representative data available.

Every effort is made to ensure that the data is validated and that 90% is accepted. However, a case-by-case basis determination may be made and the "on-site" data may also be supplemented with representative data.

20. When an applicant's air quality modeling reveals NAAQS and/or PSD increment violations, what is required to grant the permit and how are the violations resolved?

The applicant is required to demonstrate that they do not cause or contribute to the violation. The violations would be addressed by dealing with the source(s) that are causing or contributing to the violation. In general, the Department uses an informal threshold established by Appendix S. Although this threshold was established for non attainment areas, the Department believes that it is a conservative approach for looking at PSD permits.

Y ☐ N ☐ 21. Do your regulations include the federal definition

of ambient air? If no, what is your definition of ambient air?

The Department's definition of ambient air means that portion of the atmosphere, external to buildings, to which the general public has access.

22. Discuss your procedures for modeling "hot spots," including minimum receptor spacing?

The Department has suggested receptor spacing in Montana's Modeling Guideline. However, it is up to the applicant to determine the receptor spacing. The Department would ensure that the "hot-spot" receptor spacing is not more than 100 meters or less for very complex terrain.

23. How do you determine if background air quality data are representative?

Absent verified monitoring data in the area of concern, the Department has default values that are used for areas where no other significant sources exist. These background values may be used in conjunction with modeling sources that are located in the area to determine appropriate background values.

24. Do you use the same NAD for stack, receptor, and building UTM coordinates?

Yes

G. Stationary Source Determinations

Y ☐ N ☐ 1. Do your SIP-approved rules define stationary source differently than 40 CFR 51.165 or 51.166? If yes, please explain.

Yes, the Department's definition contains an exclusion for HAPs, except to the extent that such HAPs are regulated as constituents of more general pollutants listed in section 7408(a)(1) of the FCAA.

Y ☐ N ☐ 2. When determining if emissions units are contiguous or adjacent, do you assess whether emissions units under common ownership or control may be a single stationary source regardless of the distance between the emissions units? Please explain.

The Department uses EPA policy and guidance to determine if emitting units under common ownership or control are different sources. Distance between emitting units is one of the factors

considered, along with the potential to affect the same airshed.

Y ☐ N ☐ 3. Do you assess facilities' financial, personnel, and contractual relationships to determine common ownership or control?

Yes. Frequently companies will show the information to the Department and then take the information with them when they leave, instead of leaving a copy of the information with the Department.

Y ☐ N ☐ 4. Do you assess whether sources with different first two-digit SIC codes (i.e., emissions units not in the same industrial grouping) may qualify as separate stationary sources?

Yes

H. Debottlenecking and Increased Utilization

Y ☐ N ☐ 1. When determining if proposed modifications are subject to major NSR, do you include emissions increases from existing emissions units that are not physically modified(i.e., units that will be debottlenecked or have increased utilization such as boilers)?

Yes

2. What method is used to determine the emissions increase from these emissions units? What EPA guidance do you consider for this issue?

The Department looks at actual and potential emission increase from debottlenecked units and any relevant guidance to determine how the regulations affect them.

Y ☐ N ☐ 3. Do you train your permitting staff to include such emissions increases when determining if a modification is major for NSR?

Yes, through on-the-job training and relevant training courses.

I. Relaxation of Limits Taken To Avoid Major NSR

1. Describe your knowledge of the "relaxation" regulatory provisions of 40 CFR 51.165(a)(5)(ii), 51.166(r)(2), and 52.21(r)(4).

In general, if a source becomes a major source because a

limitation (that previously was placed on the source to keep it from being subject to NSR) was relaxed, then certain provisions of NSR apply to the source or modification as if it were a new source and construction had not yet commenced.

2. What types of changes do you consider potentially subject to relaxation assessments?

There are many, examples may include the relaxation of limitations on production, hours of operations, control technology requirements, process limits, etc.

Y ☐ N ☐ 3. Do you have a written policy on relaxation assessments?

No

4. Approximately how many relaxation assessments have you made in the last five years?

None, although any time changes are made to an existing major source the Department ensures that it is not relaxing a condition without the source complying with the appropriate requirements.

Y ☐ N ☐ 5. Do you include specific permit limits and conditions to make potential future relaxation possibilities more identifiable?

Yes, specific references on limitations also helps as well as a thorough discussion in our permit analysis.

6. What is your understanding of the appropriate circumstances under which an existing minor source is allowed a 100/250-tons-per-year emissions increase without triggering relaxation provisions?

In general, if a minor source undertakes a physical or operational change and the change is in and of itself considered major, then that source is subject to NSR. If during this change the source relaxes a condition that was meant to keep them out of NSR, the source would be subject to certain provisions of NSR as if they had not yet begun construction.

Y ☐ N ☐ 7. Do you provide relaxation evaluation training to NSR permitting staff employees (other than on-the-job training)? If yes, describe the nature of the training provided.

Yes, this is included in the EPA approved training that staff

attends as well as on the job training.

J. Circumvention/Aggregation Issues

Y ☐ N ☐ 1. When you review a modification to determine if it is major for NSR, do you consider aggregating prior minor emissions increases at the stationary source?

Only if netting is part of the activity or if the Department believes that the modification should be considered with previous changes.

2. Please provide any criteria you may use to determine if a series of minor modifications or projects needs to be aggregated for NSR applicability purposes?

On a case-by-case basis, the Department would look at the previous modifications to determine if they should be considered part of the same project. Subsequent projects at the same facility would be subject to the same case-by-case scrutiny.

Y ☐ N ☐ 3. When requests are made to permit new or modified emissions units as separate minor changes over time, do you evaluate whether the permitting process is purposely staged as minor when the changes are really one permitting action subject to major NSR?

Yes. Furthermore, Montana's de minimis rule also prohibits projects from being artificially split up to avoid further permitting.

II. Prevention of Significant Deterioration (PSD)

Note: The PSD program implements part C of Title I of the Clean Air Act for new or modified major stationary sources.

A. Program Benefits Quantification

Y ☐ N ☐1. In your opinion, is the PSD program an incentive to reduce emissions below major source levels?

Yes. Industry appears to be quite interested in avoiding PSD.

Y ☐ N ☐2. In your opinion, have PSD permits been used as the authority to implement other priorities such as

toxic emission reductions and improved monitoring and reporting?

Yes

Y ☐ N ☐ 3. In your opinion, does the case-by-case nature of a PSD permit allow you to implement emission reducing programs or controls more quickly than rulemaking?

Yes

Y ☐ N ☐ 4. In your opinion, does the PSD program provide communities a mechanism to be involved in improving their own air quality?

Yes. In Montana, this is the case for both major source and minor source permitting.

Y ☐ N ☐ 5. In your opinion, has the PSD program contributed to sustaining good air quality?

Yes

B. Best Available Control Technology (BACT)

Y ☐ N ☐ 1. Do you require permit applicants to use the "top-down" method for determining BACT? If no, what approach do you require?

No, the Department does not have rules that require its use, but the Department certainly recommends it. In general, most sources use the top-down approach (both major sources and minor sources).

Y ☐ N ☐ 2. Do you commonly use information resources other than the RACT/BACT/LAER Clearinghouse to identify control options, costs, etc.? If yes, what resources do you commonly use and rate the usefulness of each one?

Yes, the most beneficial is information from other states, EPA, or FLMs. For example, the FLMs have shared "pending" application emission limits with the Department in the recent past. The applicants and vendors can also provide information. The usefulness of the information depends on the specific project that is being discussed. Although vendor information is useful, it is generally more difficult to obtain.

Y ☐ N ☐ 3. Do you provide a detailed documentation/explanation of draft BACT determinations in the public record?

Yes

Y ☐ N ☐ 4. In your public record for draft BACT determinations, do you provide an economic rationale if a BACT option is rejected as being prohibitively expensive?

Yes

5. What procedures do you use to calculate baseline emission rates for calculation of cost effectiveness values? What do you view as "uncontrolled" emissions?

The Department uses uncontrolled emissions, that is emissions that would be present without the benefit of controls or other non-enforceable procedures for reducing emissions. Generally, the Department uses uncontrolled emissions as the baseline.

Y ☐ N ☐ 6. Do you consider combinations of controls when identifying and ranking BACT options (e.g., low organic solvent coatings plus thermal oxidation)?

Yes, when appropriate to do so. The Department tries to look at practical control option combinations, not every combination (theoretical options that have never been used).

Y ☐ N ☐ 7. Do you ever re-group the emissions units included in a cost evaluation? For example, if an applicant's approach is to evaluate the cost of controlling each unit separately, do you ever consider combining units for control by one control device? Conversely, if an applicant combines all units for control by one control device and concludes this approach is too expensive, do you ever consider controlling individual units or a small group of units that have the greatest percentage of total emissions?

Yes, when appropriate.

Y ☐ N ☐ 8. Do your PSD permits specify emissions limits and control methods consistent with the basis (and capabilities) of the selected BACT options?

Yes

9. How do you establish the compliance averaging times for BACT emissions limits?

The Department looks at other state's requirements regarding averaging time, the averaging time basis for limits in the RBLC, NSPS, ambient standard basis (averaging time), or any other information available.

Y ☐ N ☐ 10. Do you make sure that permit conditions impose restrictions consistent with BACT evaluation assumptions? For example, if the annual emissions used in a BACT cost evaluation are based on an assumption of less than continuous operation and/or operation at less than maximum capacity, do permit conditions contain limits based on the assumption used?

Yes

For questions 11-16 regarding BACT cost evaluations:

Y ☐ N ☐ 11. Do you allow deviation from EPA's recommended cost evaluation procedures? If yes, please explain.

If the applicant can make a demonstration that it is appropriate to deviate then we may consider it.

12. Do you place primary reliance on total or incremental cost effectiveness values? If you give greatest (or equal) weight to incremental costs, what is your basis for doing so?

Total.

Y ☐ N ☐ 13. Do you place primary reliance on a comparative cost approach or a "bright line" test?

Comparative. The Department has an "approximate line" test, but a cost comparative approach is the primary driver for our establishment of BACT.

Y ☐ N ☐ 14. If you place greatest importance on a comparative cost approach, do you try to obtain cost data for projects outside your permitting jurisdiction?

We may try and obtain costs or we may look at what other jurisdictions required and what their basis was.

Y ☐ N ☐ 15. If you use what can be described as a "bright line" test, what is the basis of your "bright line" cost

effectiveness value and do you change the value over time to account for inflation?

NA

Y ☐ N ☐ 16. Do you use a different cost approach for different pollutants? If yes, please explain.

We try to be consistent among the different pollutants. However, HAPs, VOC, and CO are generally treated slightly different.

17. Under what circumstances do you conduct a BACT cost evaluation independent of the cost evaluation provided by the applicant? (An independent evaluation could entail obtaining additional vendor quotes.)

If the Department believes it necessary to do so for whatever reason, we may do this.

Y ☐ N ☐ 18. Are cost estimates required to be referenced to a common baseyear (e.g., 1998) so that cost estimates can be easily compared?

Yes, we try to compare apples to apples.

Y ☐ N ☐ 19. Are other agencies contacted to determine if their cost estimates need to be normalized before comparisons can be made?

Yes, if we rely on costs from other agencies the Department would make sure the comparisons were appropriate.

Y ☐ N ☐ 20. Do you perform a BACT assessment for all new/modified emissions units or activities emitting a pollutant subject to PSD review no matter how small the emissions from an affected unit or activity?

Yes, all pollutants emitted in a significant amount are subject to BACT under the NSR program.

Y ☐ N ☐ 21. Do you consider increases or decreases in corollary toxic/hazardous air pollutants as part of a BACT evaluation? [This question addresses implementation of EPA's "North County Resource Recovery Remand" memo dated September 22, 1987.] If yes, please give a specific example.

No, not usually. However, such pollutants could be factored

into the BACT analysis as part of collateral environmental impacts, if it was appropriate to do so.

Y ☐ N ☐ 22. Do you provide BACT evaluation training to new (or newly-assigned) new source review (NSR) permitting staff (other than on-the-job training)? If yes, describe the nature of the training provided.

Yes, the Department's staff attend EPA sanctioned training on NSR, which includes BACT, and any other training that is available, including on the job training.

Y ☐ N ☐ 23. Do you provide BACT evaluation refresher training to experienced NSR permitting staff? If yes, how frequently do you provide this training and what is the nature of the training provided?

Yes, BACT-specific training recently became available and the Department will be sending staff to this training as time and resources allow.

Y ☐ N ☐ 24. Do you provide an information outreach program on BACT evaluations for owners of regulated sources? If yes, how frequently do you provide such information and how do you provide it?

No, not unless requested to do so.

Y ☐ N ☐ 25. Do you provide an information outreach program on BACT evaluations to the public? If yes, how frequently do you provide such information and how do you provide it?

No, not unless requested to do so.

Y ☐ N ☐ 26. Do you enter each BACT determination in the RACT/BACT/LAER Clearinghouse?

Yes, but for major NSR sources only.

Y ☐ N ☐ 27. Before establishing BACT as work practice, design, or operational standards do you determine that emissions limits (e.g., lbs/mmBTU, lbs/hr) are not feasible? If no, please explain.

Yes, and we try to factor in what is feasible and appropriate.

Y ☐ N ☐ 28. Do you apply BACT to fugitive emissions? If no, please explain.

Yes

C. Class I Area Protection For PSD Sources

1. How do you determine which proposed projects need a Class I impacts analysis, including consideration of distance of the source from Class I areas (e.g., maximum distance criteria)? Please explain.

The Department relies heavily on the FLM to determine the maximum distance they are comfortable with. Otherwise, in general every Class I area within a 200 km radius needs analysis.

Y ☐ N ☐ 2. For new or modified sources within 10 kilometers of Class I areas do you require sources to submit an impact analysis for all pollutants to determine if any have impacts greater than 1 ug/m^3?

Yes, we do this for all regulated pollutants, as required.

Y ☐ N ☐ 3. Do you require applicants to submit a Class I increment analysis for each pollutant subject to PSD review for which an increment exists?

Yes

Y ☐ N ☐ 4. Do you require applicants to identify and provide a cumulative impacts analysis (maximum impact within Class I areas) for all Class I areas impacted by the source?

Yes, specifically for increment. For AQRVs, the Montana Environmental Policy Act requires that a cumulative analysis be completed and the extent of that analysis depends on the size of the source, distance, etc.

Y ☐ N ☐ 5. Do you have a formal procedure for notifying Federal Land Managers (FLMs)? If yes, please explain.

Yes, the rules require the Department to send all application materials to the FLMs for review and comments.

Y ☐ N ☐ 6. Do your permitting procedures require the applicants to notify Federal Land Managers? If yes, please explain.

No, but during pre-application meetings, the Department strongly suggests that the applicants involve the FLMs early and often.

Y ☐ N ☐ 7. Is there communication, consultation, and discussion between you and FLMs? If yes, to what extent(e.g, high, moderate, minimal).

Yes, it is generally very high.

Y ☐ N ☐ 8. Is there communication, consultation, and discussion between the applicant and FLMs? If yes, to what extent (e.g., high, moderate, minimal)?

Yes, it is high.

Y ☐ N ☐ 9. Do you actively seek input from FLMs during the permitting process?

Yes

Y ☐ N ☐ 10. Is the applicant required to address potential adverse impacts on air quality related values (AQRVs) that are identified by the FLM during the notification process?

Yes

Y ☐ N ☐ 11. Do you require prior approval of Class I area impact analysis procedures that applicants plan to use?

No, prior approval is not required but rather highly recommended.

Y ☐ N ☐ 12. Do you require applicants to perform a visibility analysis for Class I areas?

Yes, as appropriate.

Y ☐ N ☐ 13. If a visibility impairment is indicated, do you require the applicant to notify the appropriate FLM for the Class I area?

The FLM is notified because all application materials are sent to them and they are consulted regularly by the Department.

Y ☐ N ☐ 14. Is the applicant required to address potential effects on scenic vistas associated with Class I areas that may have been identified by the FLM during the notification process?

Yes, as appropriate.

Y ☐ N ☐ 15. Do you have a formal process for handling Class I

area increment violations if predicted?
No, but if this issue arises, Montana would deal with the issues.

Y ☐ N ☐ 16. Have you issued PSD permits where the FLM objected? If yes, please explain and identify the projects.
No

D. Additional Impacts -Soils, Vegetation, Visibility, Growth

Y ☐ N ☐ 1. Do your PSD application forms specifically require information regarding additional impacts? If yes, include a copy of the forms.
No. However information regarding soils, vegetation, visibility, and growth may be collected as part of the MEPA process.

Y ☐ N ☐ 2. If no, do you require applicants to submit sufficient information necessary to complete an additional impact analysis?
The Department requires that applicants submit the necessary analysis even though it may not be specifically identified on the application.

3. What resources do you use for researching additional impacts?
Any information that may be available or submitted with the application. The Department also relies heavily on the appropriate FLM when reviewing any impact analysis.

Y ☐ N ☐ 4. Do you include environmental justice issues in your analysis?
No

Y ☐ N ☐ 5. Has an additional impact analysis in the last 5 years been a cause for concern in an issuance of a PSD permit? If yes, please explain.
Yes, recently an FLM made an adverse impact analysis on a draft permit issued by the Department; however, this was later withdrawn by the FLM.

Y ☐ N ☐ 6. Do you generally allow arguments that the protection

of the NAAQS will assure protection of vegetation? If yes, please explain.

This may be a consideration, however this really hasn't come up much in recent history.

Y ☐ N ☐ 7. Do you require that predicted short-term impacts (e.g, one hour NOx impacts)be used to assess impacts on vegetation for pollutants which do not have short term ambient standards? If no, please explain.

Yes, if appropriate to do so. Also, the Department relies on input from the FLMs regarding this issue.

Y ☐ N ☐ 8. Regarding visibility impacts, do you require assessments for vistas (e.g., parks, airports) near the proposed source or modification? If no, please explain.

Yes, as appropriate.

E. Preconstruction Monitoring

Y ☐ N ☐ 1. Do you have formal preconstruction monitoring requirements?

Yes, the rules describe when preconstruction monitoring is required.

Y ☐ N ☐ 2. Do you have a formal public participation process regarding requirements for preconstruction monitoring for specific proposed projects?

Yes, this is part of the normal permit review process and permit issuance. The applicant is required to notice the submittal of the application in the newspaper. In addition, the Department completes a public notice with the draft permit or EIS.

Y ☐ N ☐ 3. Have you ever consulted with FLM regarding preconstruction monitoring requirements for a proposed source or modification?

Yes

Y ☐ N ☐ 4. In the last five years have you ever required an applicant applying for a PSD permit to conduct preconstruction ambient monitoring or meteorological monitoring?

Yes

Y ☐ N ☐ 5. Do you have a formal approval/denial process at the conclusion of preconstruction monitoring?

Yes

Y ☐ N ☐ 6. Do you have a formal process during preconstruction monitoring for resolving conflicts between the FLM and the applicant? If yes, please explain.

No, any process used would be more informal. However, if a permit decision is challenged to the Board of Environmental Review, the hearing process would be formal.

Y ☐ N ☐ 7. Do you routinely provide ambient monitoring data in lieu of requiring applicants to perform preconstruction monitoring? If yes, please briefly describe the monitoring network used and the basis for the monitoring value selected.

No, not routinely. There are instances where the Department has used existing monitoring data and determined that this data is appropriate to use to satisfy the preconstruction monitoring requirements.

Y ☐ N ☐ 8. Do you follow EPA guidance (e.g., siting, equipment, data validation, audits) regarding collection of preconstruction monitoring data?

Yes

9. Under what circumstances would you require post construction ambient monitoring as a condition of a PSD permit?

When the Department determines it is necessary to determine the effect the source's emissions would have on the air quality of an area. Also, the Department uses an internal guidance document to help determine the appropriateness of post-construction monitoring.

F. Increment Tracking Procedures

1. What method do you use to assign baseline dates, e.g., county-specific, region-specific, or entire state?

The date the 1 ug/m3 baseline area is defined.

Y ☐ N ☐ 2. Do you have a list of the minor source baseline dates for each area?

Yes. Montana has maps for NO_x, SO_2, and PM_{10} that identify these areas.

Y ☐ N ☐ 3. Do you have an understanding of receptor location dependence vs. source location dependence for increment tracking?

Yes

4. Do you have a formal or informal program for increment tracking?

More informal at this point because very few, if any, new sources have moved into the areas of concern.

Y ☐ N ☐ 5. Do you maintain and update a computerized emission source database for increment tracking that includes minor sources that affect increment? If yes, does the database include the information needed for modeling (e.g., source locations, stack parameters, emissions)?

Yes, this information is contained in our database.

6. Do you use allowable or actual emissions for increment tracking purposes? If actual emissions, how do you calculate emissions for each averaging period covered by the increments?

Actual emissions would be used for existing sources consuming increment while allowable would be used for those sources not yet permitted or in operation. There could be many different ways for determining the emissions for each averaging period, either emission factor-type information, actual source test data, emissions data from CEMS, etc.

Y ☐ N ☐ 7. Are area sources included in increment tracking analyses, e.g., growth-related and transportation-related emissions?

Yes

8. How frequently is increment consumption evaluated - on a scheduled basis or just when occasioned by a new permit application?

Primarily when a new application is submitted because there is very little growth in Montana.

9. How "transparent" (i.e., understandable) is the emission source inventory used for PSD modeling? Could an outside reviewer (such as a member of the public) clearly identify the sources included (e.g., name, location, stack parameters) and the sources excluded in a modeling analysis?

Yes, if the "outside reviewer" had some knowledge of what they were looking for regarding the sources.

10. How do you handle interstate increment tracking (for state reviewing authorities) or interjurisdiction tracking (for local reviewing authorities), including consistency of tracking across jurisdiction boundaries?

The Department would work with the other state or jurisdiction to obtain the necessary data.

11. What procedure do you follow in planning for and incorporating new modeling tools?

There isn't a set procedure. The Department would review the new modeling tools to determine their appropriateness and consult with other authorities as necessary.

Y ☐ N ☐ 12. Do you provide increment tracking training to NSR permitting staff (other than on-the-job training)? If yes, describe the nature of the training provided.

No. However, there will be a workshop regarding this issue this fall that Montana will attend.

G. Endangered Species Act (ESA)

Y ☐ N ☐ 1. Do you have a PSD program that is fully approved by EPA (i.e., SIP-approved)?

Yes

Y ☐ N ☐ 2. Do you have a fully or partially-delegated PSD program? (Note: ESA obligations apply only when all or portions of a PSD program have been delegated.) If yes, answer questions 3 through 6 below.

No

Y ☐ N ☐ 3. Do you notify PSD permit applicants of their ESA

obligations? If so, please provide a copy or description of your notice.

NA

Y ☐ N ☐ 4. Do you know the difference between a formal vs. an informal consultation process?

NA

Y ☐ N ☐ 5. Do you advise applicants, concerning their ESA obligations, to consult with a.) EPA; b.) The U.S. Fish and Wildlife Service; and/or c.) Federal Land Manager? If yes, please explain, and describe what information you provide to applicants concerning their ESA obligations.

NA

Y ☐ N ☐ 6. Does an ESA consultation affect the timing of your issuance of a proposed or final PSD permit? If yes, please explain.

NA

III. Nonattainment NSR

A. Program Benefits

Y ☐ N ☐ 1. In your opinion, is the nonattainment NSR program an incentive to reduce emissions below major source levels?

Yes

Y ☐ N ☐ 2. In your opinion, have nonattainment NSR permits been used as the authority to implement other priorities such as toxic emission reduction and improved monitoring and reporting?

Yes

Y ☐ N ☐ 3. In your opinion, does the case-by-case nature of a nonattainment NSR permit allow you to implement emission reducing programs or controls more quickly than rulemaking?

Yes

Y ☐ N ☐ 4. In your opinion, does the nonattainment NSR program

provide communities a mechanism to be involved in improving their own air quality?

Yes

Y ☐ N ☐ 5. In your opinion, have the nonattainment NSR requirements contributed to reducing emissions or avoiding emissions increases in nonattainment areas?

Yes

B. NSR Offsets

Y ☐ N ☐ 1. Do you have an emissions "bank" for offsets? If no, go directly to 10.

No

Y ☐ N ☐ 2. Is the bank a database used for emissions trading? Please explain how the trading works.

NA

Y ☐ N ☐ 3. Do you, as the reviewing authority, control the trading of credits in the "bank"? If no, who controls the trading?

NA

Y ☐ N ☐ 4. Are the credits certified "creditable" (including surplus for attainment planning purposes and other Clean Air Act requirements) by you at time of entry into the bank?

NA

Y ☐ N ☐ 5. Are the credits evaluated and certified "creditable" (including currently surplus) at the time of withdrawal and use? If no please explain.

NA

6. How long are the "offsets" valid from time of reduction?

NA

Y ☐ N ☐ 7. Are the banked credits included in the attainment demonstration and inventory as "real emissions" (i.e., emissions being emitted into the air)?

NA

Y ☐ N ☐ 8. Are the banked credits used for NSR offsets only? If no, what are the other uses?

NA

Y ☐ N ☐ 9. Are the banked credits discounted with time? If yes, please explain the discounting procedures.

NA

10. How do you determine that the reductions being used are properly included in the attainment demonstration?

The Department accounts for appropriate reductions in its attainment demonstration. The Department makes sure that there is no double counting for attainment or offsets.

Y ☐ N ☐ 11. Are the emissions reductions available for NSR offsets only allowed from the same nonattainment area as the proposed source or modification? If no, please explain.

No, unless there are impacts from one source on multiple non-attainment areas or unless otherwise allowed under the Clean Air Act.

12. What procedures do you use to determine the baseline to quantify the reductions? How do you quantify the amount of creditable reduction?

The Department would look at the amount by which actual emissions are being reduced to quantify the amount of reductions available.

Y ☐ N ☐ 13. Are the records for determining actual emissions available for review by you?

Yes

Y ☐ N ☐ 14. Are copies of permits required as part of the permit application to determine if the reductions from other sources being proposed as NSR offsets are federally enforceable?

Yes, but this information is generally available on file with the Department.

15. How do you verify that the reductions proposed for NSR offsets are "surplus" to other Act

requirements and are "real," i.e., reductions in emissions that were actually emitted into the air?

The Department first requires the applicant to make this demonstration and then the Department reviews all available resources to determine the appropriateness of the reductions.

16. What process do you use to verify that the reductions were not used in a previously issued permit?

The Department first requires the applicant to make this demonstration and then the Department will review all available information to make a determination.

Y ☐ N ☐ 17. Do you allow interpollutant trading for NSR offsets? If yes, please describe this trading procedure (e.g., pollutants allowed, ratio of reductions required, eligibility criteria, etc.).

No

Y ☐ N ☐ 18. For serious and severe ozone nonattainment areas do you allow "internal offsets" instead of lowest achievable emissions rate (LAER)? What is the offset ratio?

NA

Y ☐ N ☐ 19. Do you allow credits used for netting to be used as nonattainment NSR offsets?

Yes, if it can be demonstrated that there is a reduction in actual emissions and there will be a net air quality benefit

Y ☐ N ☐ 20. Do your nonattainment NSR rules require the offset ratios prescribed in the Clean Air Act? If no, please explain what other ratios are used?

The Department requires offset ratios of 1:1 or greater.

Y ☐ N ☐ 21. Do you require that applicants proposing to use NSR offsets include a "net air quality benefit" modeling analysis as part of their permit application? If yes, please describe what information is required.

Yes, a positive net air quality benefit analysis is required; however, the specific information required to be submitted is not identified in the rules.

C. LAER Determinations

Y ☐ N ☐ 1. Do you require permit applicants to use a top-down approach to determine the most stringent control option available for LAER? If no, what approach do you require?

No, the top down approach is not required by the rules; however, this approach would be highly recommended by the Department to determine LAER.

Y ☐ N ☐ 2. Do you require a permit applicant to identify all available control options? If yes, do you require the applicant to identify control options as being:

Yes

Y ☐ N ☐ a. Achieved in practice?

Yes

Y ☐ N ☐ b. Contained within the SIP of any other state or local reviewing authority?

Yes, as described in the LAER definition contained at ARM 17.8.901(10).

Y ☐ N ☐ c. Technologically feasible?

Yes

Y ☐ N ☐ d. Cost effective?

No, because cost is not a component of LAER.

Y ☐ N ☐ 3. Do you use information sources other than the RACT/BACT/LAER Clearinghouse to identify control options? If yes, what information sources do you commonly use and rate the usefulness of each?

Yes, the Department uses the RBLC as well as other information from states, EPA, or FLMs. The Department would also use vendor or any other information that is available. The usefulness of the information would depend on the specific project that is being discussed.

4. Please describe under what circumstances you would conduct a LAER analysis independent of the analysis conducted by the permit applicant.

If the Department did not agree with the content of the applicant's analysis, the Department may conduct its own analysis.

Y ☐ N ☐ 5. Do you submit your LAER determinations to the EPA's RACT/BACT/LAER Clearinghouse?

Yes

Y ☐ N ☐ 6. Do you consider technology transfer in your LAER determinations?

Yes

7. If you consider cost effectiveness in LAER determinations, please describe the procedures used. (For example, describe the procedures used to calculate the baseline emission rate in the cost effectiveness determination.) For each criteria pollutant, provide the dollar/ton threshold used to determine whether a control option is cost effective (and state whether this is total or incremental cost).

NA, cost is not a component of LAER.

Y ☐ N ☐ 8. Do you use a different cost approach for different pollutants? If yes, please explain.

NA

Y ☐ N ☐ 9. Do you provide detailed documentation or explanations of proposed LAER determinations in the technical support document (TSD) or public record?

Yes

Y ☐ N ☐ 10. Do you provide an economic rationale in the TSD or public record if a LAER option is rejected as being prohibitively expensive?

NA

Y ☐ N ☐ 11. Do you consider combinations of controls when identifying and ranking LAER options?

Yes, as appropriate.

Y ☐ N ☐ 12. Do you perform a LAER assessment for all new/modified emission units or activities emitting a nonattainment pollutant subject to major NSR

review no matter how small the emissions from an affected unit or activity?

Yes

Y ☐ N ☐ 13. Does your LAER analysis include "time of" considerations? (For example, if a new or modified source had constructed without a permit and at a later time went through nonattainment NSR review, would you consider LAER at the time of permit issuance or at the time of emission unit construction/ modification?)

The LAER analysis would be LAER at the time of permit issuance.

Y ☐ N ☐ 14. Do your permits contain conditions requiring specific emission limits/ control method conditions/work practice standards consistent with the basis (and capabilities) of the selected LAER option?

Yes

15. Please describe how you establish compliance averaging times for LAER emission limits.

This would depend on the nonattainment area and the analysis that was conducted as part of a permit application.

Y ☐ N ☐ 16. Do your permits contain conditions requiring emissions testing, monitoring, record keeping, and reporting so that inspectors and enforcement personnel can easily determine compliance with LAER requirements? If no, please explain.

Yes

Y ☐ N ☐ 17. Do you ensure that permit conditions impose restrictions consistent with the LAER determination? (For example, if emissions used in the LAER determination are based on an assumption of less than continuous operation and/or operation at less than maximum capacity, do permit conditions contain limits or restrictions based on the assumptions used?)

Yes

18. Please describe how you incorporate public comments into your LAER determinations.

The public would have an opportunity to comment on the application as well as any permit that was issued for a source. The Department reviews all public comments on a proposal and incorporates those changes that the Department believes are appropriate.

Y ☐ N ☐ 19. Do you provide LAER evaluation training to new (or newly-assigned) NSR permitting staff other than on-the-job training? If yes, please describe the nature of the training provided.

Yes, the Department staff receives EPA sanctioned training on NSR as well as on the job training.

Y ☐ N ☐ 20. Do you provide LAER evaluation refresher training to experienced NSR permitting staff? If yes, how frequently do you provide this training and what is the nature of the training provided?

No

Y ☐ N ☐ 21. Do you provide an information outreach program on LAER evaluations for owners or operators of regulated sources? If yes, how frequently do you provide such information and how do you provide it?

Only if requested to do so.

Y ☐ N ☐ 22. Do you provide an information outreach program on LAER evaluations to the general public? If yes, how frequently do you provide such information and how do you provide it?

Only if requested to do so.

D. Alternatives Analysis

Y ☐ N ☐ 1. Does each nonattainment NSR permit action address the alternatives analysis as required by section 173(a)(5) of the Clean Air Act?

Yes, this information is required in the application as well.

Y ☐ N ☐ 2. Is this alternatives analysis a specific requirement of your nonattainment NSR rules?

Yes

Y ☐ N ☐ 3. Do you have criteria that would address the depth of

analysis required for a specific project?

Not in the rules.

Y ☐ N ☐ 4. Do you include project-specific environmental justice issues that are raised as part of this analysis?

Yes, Montana would do this as described in Section 173(a)(5) of the Clean Air Act. Such issues are also described in the Montana Environmental Policy Act (MEPA) compliance document (generally an EA) that is created with each permit action requiring public input.

Y ☐ N ☐ 5. Do you know of any projects where this analysis resulted in changes to proposed projects? If yes, what changes resulted?

No

E. Compliance of Other Major Sources in the State

Y ☐ N ☐ 1. Do you require the permit applicant to demonstrate that all major stationary sources owned or operated by the applicant in your State are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable emission limitations and standards?

Yes, the Department does require that the applicant certify that all major stationary sources owned and operated by the applicant are in compliance with all applicable emission limitations and standards (See ARM 17.8.905(1)(b)).

2. Please describe - a) the criteria used by an applicant in a statewide compliance demonstration, and b) when in the permitting process you require the applicant to make the statewide compliance demonstration.

The Department requires this analysis as part of its review of the application. There are no specific criteria identified to be used by the applicant in this demonstration as there may be a variety a methods and criteria available for use.

IV. Minor NSR Programs

A. NAAQS/INCREMENT Protection

Y ☐ N ☐ 1. Do you use modeling to assure that minor sources and

minor modifications will not violate the NAAQS?

Yes

Y ☐ N ☐ 2. As a result of modeling are air quality monitors required for some sources as a permit condition?

Yes

Y ☐ N ☐ 3. For the pollutants with PSD increments established do you have a list of areas where the minor source baseline has been triggered?

Yes. The information is contained on a tracking map.

Y ☐ N ☐ 4. Do you model minor sources for PSD increments if the minor source baseline is triggered?

Yes, as appropriate.

Y ☐ N ☐ 5. Do you have procedures in place to identify minor sources that consume or expand PSD increment?

Yes

6. How does the public access a list of sources that affect PSD increments?

Any information that the Department has in its files are available for inspection by the public. Also, the Department has a database that may be used for such information.

B. Control Requirements

Y ☐ N ☐ 1. Does your SIP require any level of control for emissions units not subject to major NSR requirements (e.g., BACT or LAER)? For example, do you have a BACT or similar requirement for minor modifications?

Yes, the State of Montana has BACT requirements for all sources requiring an air quality permit.

Y ☐ N ☐ 2. Are there any monitoring or reporting requirements for minor sources?

Yes

Y ☐ N ☐ 3. Does the application or permitting process require modeling for minor sources?

Yes

Y ☐ N ☐ 4. Do you require minor sources with Federally

applicable permit limits for MACT, NSPS, or NESHAP to report compliance?

Yes

C. Tracking Synthetic Minor NSR Permits

Y ☐ N ☐ 1. Do you have records listing sources permitted as synthetic minors? If yes, how is this list updated?

The Department does not maintain a specific list of sources that "synthetic minor" from PSD. Such a list has been used to track information for "synthetic minor" sources from the Title V program.

Y ☐ N ☐ 2. Do you have an established procedure for tracking synthetic minor permits?

No

Y ☐ N ☐ 3. Do you include "prompt deviation" reporting requirements in synthetic minor source permits? If yes, how do you define "prompt deviation"?

No. But similar information is gathered through the normal recordkeeping requirements of the permit.

Y ☐ N ☐ 4. Do permit applications your agency reviews, and permits issued identify the requirements (e.g., PSD, nonattainment NSR, Title V, NESHAP) being avoided by keeping the source minor?

Yes

IV. Public Participation

A. Public Notification

1. What criteria are used to determine if a permit is public noticed?

All major NSR permits issued by the Department are also published in a newspaper to inform the public of the draft decision. In addition, the applicant is required to publish a public notice as part of the permit application submittal. The draft permit is also saved to the Department's website upon issuance and will be sent to interested parties upon request.

Y ☐ N ☐ Are new nonattainment NSR and PSD permits noticed?

Yes

Y ☐ N ☐ Are major modifications noticed?
Yes

Y ☐ N ☐ Are synthetic minor permits noticed?
No, not by the Department; however, there are public notice provisions for all preconstruction permits (minor and NSR). In addition, the permits are placed on the Department's website upon issuance.

Y ☐ N ☐ Are netting permits noticed?
See response immediately above.

Y ☐ N ☐ Are minor permits noticed?
Other?
See response above.

Y ☐ N ☐ 2. Do you publish notices on proposed NSR permits in a newspaper of general circulation?
Yes, the permits are also saved to the Department's website.

Y ☐ N ☐ 3. Do you use a state or other publication designed to give general public notice? If yes, please describe.
Yes, the Department uses its web-site as well as newspapers to inform the public of permitting decisions.

Y ☐ N ☐ 4. Do you have procedures for notifying the public when major NSR permit applications are received?
Yes, this requirement is placed on the applicant as specified in Montana rule.

Y ☐ N ☐ 5. Have you developed a mailing list of interested parties for NSR permit actions [e.g., public officials, concerned environmentalists, citizens]? If yes, how does one get on the list?
Yes, the list is application-specific and members of the public just need to notify the Department of their interest.

Y ☐ N ☐ 6. Aside from methods described above, do you use other means for public notification? If yes, what are they (e.g., post notices on your webpage, email)?
Yes, both web-sites and e-mails are frequently used as well as

telephones, radio and television interviews, and conversations with interested persons.

Y ☐ N ☐ 7. Do your public notices clearly state when the public comment period begins and ends?

Yes

8. What is your opinion on the most effective ways to provide public notice?

The web-site as well as all of the other media available (TV, radio, newspaper).

Y ☐ N ☐ 9. Do you provide notices in languages besides English?

No, not unless requested.

Y ☐ N ☐ 10. Have you ever been asked by the public to extend a public comment period? If yes, did you grant the extension? If no, please explain?

Yes, however, the Department can only in certain instances extend the public comment period so in most cases this request is rejected. The Department has extended the comment period for projects subject to an EIS and for projects subject to the incinerator provisions.

11. What approximate percentage of your major NSR permits are revised due to public comments?

This definitely depends on the source. Excluding comments from the applicant, at least 50% are generally revised for some reason or another. However, public participation seems to be increasing, based upon the last several years of permitting experience.

12. If a draft permit is revised, what criteria do you use to determine if a permit should be re-issued in draft?

If the changes clearly exceed the scope of the application or if the Department determines that the public could not have reasonably anticipated the change.

13. What type of comments or other concerns trigger a public hearing?

The Department would conduct a "public hearing" when requested,

as allowed by the statute.

14. How are public hearings noticed? How much notice is given?

Public hearings are noticed much the same way as applications and permits (i.e. newspaper, web-site, radio, etc,) and generally the Department tries to provide as much notice as possible (30 days if possible).

15. What is your process for the public to obtain permit-related information (such as permit applications, draft permits, deviation reports, monitoring reports) especially during the public comment period?

The public just needs to notify the Department of their interest and the Department explains where the information may be obtained.

Y ☐ N ☐ 16. Do you have a website for the public to get permit-related documents? What is available online? How often is the website updated? Is there information on how the public can be involved?

Yes, currently the air permits are on the web, either in draft or final form, as well as the analysis for each permit and the Montana Environmental Policy Act compliance. Information is generally added/updated on the web daily (as permits are sent out).

Y ☐ N ☐ 17. Do you provide training to citizens on public participation or on NSR? If yes, approximately how many training opportunities have been provided in the last five years.

No, unless requested.

18. How do you notify affected States (including tribes and Canada) of draft permits?

The Department sends the application material as well as draft and final permits to affected states and tribes if requested. They are also notified in the requested information about how to participate in the permit process should they choose to do so.

Y ☐ N ☐ 19. Do public notices for PSD permits specifically state the amount of increment consumed?

Yes

Y ☐ N ☐ 20. Are public notices for PSD permits sent to each party identified in 40 CFR 51.166(q)(2)(iv)?

Yes

B. Environmental Justice (EJ)

Note: By EJ analysis we refer to any procedures applied during the permitting process, regardless of whether they are called EJ, that consider demographics (race, income, nationality, etc.), cumulative effects, (burden, exposure, risk), comparative effects or modifications to the public involvement processes to address unique characteristics of the project.

Y ☐ N ☐ 1. Do you consider EJ issues during the permitting process? If yes, please provide a description of the criteria, guidelines, or screening procedures used to address EJ issues.

Yes, to the extent that MEPA prescribes that the state look at social and cumulative effects. The Department conducts MEPA for every permitting action that requires public input.

Y ☐ N ☐ 2. Regarding section 173(a)(5) of the Clean Air Act, do you conduct an alternatives analysis as part of your nonattainment area permitting process? If yes, please provide a description of the EJ criteria or guidelines used for this analysis.

Yes, an analysis considering alternatives is required, but there are no EJ criteria or guidelines developed for this analysis by the Department, beyond the requirements of MEPA and Section 173(a) of the CAA.

Y ☐ N ☐ 3. Regarding section 165(a)(2) of the Clean Air Act, does your NSR permitting program and public comment process for PSD regulated pollutants provide for consideration of alternatives?

Yes, as allowed by Section 165(a)(2) and MEPA.

4. How are the demographics of the affected community taken into account in the permitting process?

Generally, the demographics of an area are factored into the MEPA document.

5. How are cumulative effects and/or pre-existing burden addressed in the permitting process?

Cumulative effects are addressed in MEPA as well as in the demonstration of compliance with the MAAQS, NAAQS, and increment.

6. What additional community information and/or demographics (for example - children, the elderly) do you consider important for an EJ analysis?

Those factors that are identified through the MEPA process.

Y ☐ N ☐ 7. Do you allow public involvement during an EJ analysis? If yes,

a. What stakeholder groups do you try to involve?

Those groups request to be involved or submit comments regarding the Department's draft decision.

b. At what point in the EJ analysis or permitting process do stakeholders become involved?

Generally, stakeholders can get involved upon initial submittal of the permit application. Any comments submitted from application submittal forward are considered, as appropriate.

c. To what degree and in what manner do stakeholders or the community influence the permit decision making process?

The substance of the comments determine the degree to which the stakeholders/community will be involved. Those interested can have great influence on the permit decision, as allowed by law.

d. To what degree do you know about how stakeholders or the affected community participated in the permit decision making process?

This depends on the situation. The easiest way to know of stakeholder involvement is to review comments submitted and talk with the specific permit reviewer for a particular source.

e. Describe how you make information available to stakeholders and the affected community. (For example - translation of information, understandable and accessible materials, personal contacts, clearly explained technical information including potential risk, distribution of information, public meetings, etc.)

All of the information submitted to the Department is public information and available for public inspection (unless deemed confidential). Department staff is available to answer questions and explain permit information. Also, the Department decisions are further detailed in a permit analysis.

Y ☐ N ☐ 8. In the EJ analysis, do you consider direct and indirect benefits and burdens from the proposed actions? If yes,

a. Describe what benefits you consider in the EJ analysis. (For example - economic, social, cultural, health, environmental, etc.)

The Department describes the social and economic, as well as the physical and biological, aspects of a project (pros and cons) in the MEPA document.

b. Describe what burdens you consider in the EJ analysis. (For example - economic, social, cultural, health, environmental, etc.)

See response to 8.a above.

Y ☐ N ☐ 9. In the EJ analysis, do you consider comparative and disproportionate impacts? If yes,

Yes

a. Describe the criteria or procedures used to determine any potential or actual adverse health or environmental effects or impacts.

This is determined on a case-by-case and criteria-by-criteria basis. The Department attempts to identify such impacts by requiring that the applicant to take the first shot at identifying social/economic and physical/biological impacts. The Department uses this information in conjunction with Department research to identify impacts.

b. Describe the criteria or procedures used to determine whether evidence exists to describe these effects or impacts.

See response to 9.a above.

c. Describe the criteria or procedures used to determine whether the proposed project complies with all applicable environmental laws.

See response to 9.a above.

V. Program Staffing and Training Issues

1. What is the total number of staff dedicated to permitting for your NSR program? Please provide an organizational chart.

10 technical staff which includes a modeler. There is also a permitting supervisor involved. This staff is responsible for minor NSR permitting, major NSR permitting, and Title V permitting.

2. For your NSR program please breakdown the staff into the different job functions (e.g., number of modelers, review engineers, technicians, environmental scientists, clerical, supervisory, enforcement).

5 engineers, 4 permitting specialists, 1 modeler, 8 compliance specialists, 1 clerical, 2 supervisors, 1 monitoring, 1 data management, 1 enforcement. This staff is responsible for minor NSR permitting, major NSR permitting, and Title V permitting.

3. Please describe your training program for new and existing staff who work on NSR permitting and issues. List any materials you use or training course you try to attend.

The staff are primarily trained by existing senior staff and supervisors who have experience in the program. The staff also try to attend as much NSR training, conference calls, etc. as possible. The Department uses EPA's draft NSR Manual for training as well as other training material made available through EPA or other trainers.

4. Describe any additional training that you believe would be beneficial. Would you like for EPA to provide more NSR training?

Yes, EPA needs to provide more NSR training, especially of the advanced type and specific to NSR Reform. Specific NSR training to Montana and BACT training would also be beneficial.

Y ☐ N ☐ 6. Do you provide NSR program training opportunities for the public, including the regulated community? If yes, please describe.

No formal training, but would provide training if requested to

do so.

VI. General NSR Program Issues

Y ☐ N ☐ 1. Do you implement EPA issued program guidance and policy for NSR? In no, please explain.

Yes, when it is consistent with the rules and statutes.

Y ☐ N ☐ 2. In general, how do you learn about federal NSR rule changes? Do you use EPA's TTN website at www.epa.gov/ttn to monitor NSR program changes and implementation issues?

The Department mainly learns of these changes through involvement with WESTAR or STAPPA. EPA's web-site is consulted at times as well.

3. How do you determine if emissions factors (e.g., AP-42) are acceptable for NSR applicability purposes?

The staff reviews the source of the factor and determines if it is appropriate for use. Staff may also review other sources such as states, EPA, FLMs, vendors, etc. to determine the appropriateness of any factor depending on what it is.

4. Please provide any comments, suggestions, or concerns you may have regarding the NSR program.

The NSR program and the rules implementing the program should be reviewed and made clearer instead of the adoption of so much guidance to interpret the program. In addition, there is a real problem of consistency across every EPA region and within EPA regions.

5. Please provide the number of non-major permits you issued last year, not counting renewals.

~200

6. How many PSD permits did you issue last year?

~3

7. How many nonattainment NSR permits did you issue last year? Since 1990?

0, (1 since 1990 (1993))

8. For PSD permits what is the average time (months) taken by you to issue the permit, starting from the time the application was determined complete? For nonattainment NSR permits?

A completeness determination is made within 30 days of application receipt. Once an application is complete the Department must meet statutory timelines, on average it takes about 2 months to issue a PSD permit and probably about the same for the nonattainment NSR permit. From initial submittal of an application, a draft permit is generally issued in about 7 months.

Y ☐ N ☐ 9. Do you have a formal procedure for establishing past permit violations related to NSR requirements?

Yes

Y ☐ N ☐ 10. Do you have a formal procedure for dealing with "self reported" NSR violations?

Yes

Y ☐ N ☐ 11. Do you have formal enforcement procedures for dealing with past violations of NSR requirements, including applicable BACT or LAER requirements of major NSR?

Yes

Y ☐ N ☐ 12. Do you include PM10 condensible emissions in the total amount of PM10 emissions when determining PSD applicability, BACT, PSD increment, and NAAQS?

Yes

Y ☐ N ☐ 13. When PM10 testing is required do you include a permit condition that requires testing and specifies testing methods for PM10 condensibles?"

Yes, as appropriate.

VII. Effective Construction Permits

Do your construction permits:

Y ☐ N ☐ 1. Identify each emissions unit regulated?

Yes

Y ☐ N ☐ 2. Establish emissions standards or other operational limits that must be met, including appropriate averaging times for numeric limits?

Yes

Y ☐ N ☐ 3. Include specific methods for determining compliance and excess emissions, including reporting, record keeping, monitoring, and testing requirements?

Yes

Y ☐ N ☐ 4. Outline procedures necessary to maintain continuous compliance with emission limits?

Yes

Y ☐ N ☐ 5. Establish specific, clear, concise, and enforceable permit conditions?

Yes

Y ☐ N ☐ 6. Include conditions necessary for a source to avoid otherwise applicable requirements (e.g., keeping a modification "minor")?

Yes

APPENDIX B
MDEQ MONITORING REQUIREMENTS

APPENDIX C
EPA LETTERS REGARDING DEFINITION OF BASELINE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

MAR 1 - 1999

Ref: 8P-AR

Robert Raisch, Chief
Resource Protection Planning Bureau
Planning, Prevention and Assistance Division
Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901

Dear Bob:

I am writing to follow up with you on some issues regarding the State's planned redesignation of its prevention of significant deterioration (PSD) baseline areas. Specifically, we understand that the National Park Service (NPS) and the Fish and Wildlife Service (FWS) submitted comments to you on the State's planned redesignation of unclassifiable/attainment areas on January 25, 1997. EPA has reviewed that letter, and we believe the Federal Land Managers have raised some valid concerns that should be addressed by the State before moving forward with scheduling a public hearing for State adoption of the area redesignations under section 107 of the Clean Air Act.

The NPS and FWS requested verification of the State's position that emissions have decreased in the State since the original minor source baseline dates for sulfur dioxide (SO2), particulate matter (PM), and nitrogen dioxide (NO2). EPA believes this information would also be useful in determining the extent to which this redesignation represents a SIP relaxation. It would be especially helpful to know if these emissions reductions have occurred throughout the State, or if there are any areas in the State that may have seen emissions increases since the original minor source baseline dates were triggered. Thus, when the State completes this analysis, EPA requests that a copy be sent to our office as well as to the NPS and FWS.

The NPS and FWS also requested that the State perform increment analyses for all NPS and FWS Class I areas both for the original minor source baseline dates for SO2, PM, and NO2 as well as for later baselines dates which the State believes are more protective. EPA believes this request was based on the discussion at the November 4, 1998 Clean Air Act Advisory Council (CAAAC) meeting, at which the State offered to consider keeping the minor source baseline dates triggered for the Class I areas in the State as of 1993 (i.e., when the State revised its definitions of "baseline area" and "minor source baseline date") rather than the originally established baseline dates. If the State were to establish new minor source baseline dates that are later than the minor source baseline dates originally triggered for SO2, PM, and NO2 in the State, then such dates would have to be clearly specified in Montana's PSD rules and approved into the SIP. (Otherwise, the legally established dates would continue to be determined by the State's

definitions of "minor source baseline date" and "baseline area," which tie the minor source baseline date to the date of the first complete PSD permit application for a source proposing to locate in or significantly impact an area designated as attainment or unclassifiable under section 107 of the Clean Air Act). If the State ultimately decides to establish different minor source baseline dates for the Class I areas in the State, then the demonstration requested by the NPS and FWS would also suffice to demonstrate to EPA whether the new minor source baseline dates would represent a relaxation for those Class I areas. EPA believes the NPS's and FWS's request is necessary because it would be very difficult for those Federal Land Managers to make an informed decision regarding the most protective minor source baseline date for the Class I areas without such an analysis.

EPA is encouraged that the State appears willing to work with the Federal Land Managers in this redesignation process to ensure that the Clean Air Act protections for Montana's Class I areas are not compromised by the redesignation. We would appreciate your keeping us apprised of any future discussions with the Federal Land Managers and/or changes to your proposed redesignation plans. If you have any questions on this letter, please feel free to contact me at (303) 312-6004, or have your staff contact Vicki Stamper at (303) 312-6445.

Sincerely,

Larry Svoboda, Leader
Air Quality Planning and Management Unit

cc: Jan Sensibaugh, Permitting and Compliance Assistance Division, MT DEQ
Chuck Homer, Permitting and Compliance Assistance Division, MT DEQ
Bob Habeck, Planning, Prevention and Assistance Division, MT DEQ
Christine Shaver, Air Resources Division, NPS
Sandra Silva, Air Quality Branch, Fish and Wildlife Service

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

JUL - 9 1996

Ref: 8P2-A

Jan P. Sensibaugh, Administrator
Permitting and Compliance Assistance Division
Montana Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901

Dear Jan:

The purpose of this letter is to respond to your May 9, 1996 letter in which you requested comments on your options for defining prevention of significant deterioration (PSD) baseline areas and setting minor source baseline dates. Before we discuss our comments on your options, we would like to make clear how we currently interpret the baseline areas and the minor source baseline dates in Montana. EPA interprets the PSD baseline areas in Montana to be those areas designated under section 107 of the Clean Air Act (Act) [which are listed in 40 CFR 81.327] as attainment or unclassifiable for the three pollutants with increments [PM-10, sulfur dioxide (SO_2), and nitrogen dioxide (NO_2)]. EPA believes the minor source baseline dates have been triggered for the majority of the State for all three of these pollutants. This interpretation is based on the State's PSD definitions, as well as EPA's PSD requirements. The Enclosure to this letter details the basis for EPA's interpretation, which you should refer to for further information.

Your May 9, 1996 letter indicated that the State wanted to define PSD baseline areas as the area of modeled 1 ug/m^3 impact for each major source for all three pollutants with PSD increments. Your May 1996 letter outlined three options that the State was considering to implement its PSD program in this manner. Our comments on the three options are as follows:

Option 1: Interpret the State's existing definition of "baseline area" as establishing 1 ug/m^3 impact area baseline areas.

The State's regulations define "baseline area" as "any intrastate area (and every part thereof) designated as attainment or unclassifiable in 40 CFR 81.327 in which the major source or major modification establishing the baseline date would construct or would have an air quality impact equal to or greater than 1 ug/m^3 (annual average) of the pollutant for which the minor source baseline date is established."

For numerous reasons, EPA cannot interpret the State's definition of "baseline area" as establishing impact area baseline areas. First, the State's definition is basically identical to the federal definition in 40 CFR 51.166(b)(15)(I), except that EPA's definition refers to areas "designated under section 107(d)(1)(D) or (E) of the Act" rather than listing the federal regulation where such designations are promulgated, and EPA does not interpret the federal definition as allowing for source impact area baseline areas. In fact, the State's definition more clearly points the reader to the unclassifiable and attainment areas promulgated in 40 CFR 81.327. Further, the phrase "and every part thereof" in the definition of "baseline area" clarifies that, once a source locates in or has a 1 ug/m^3 impact in an "area," every part of those "areas" is considered a baseline area with one baseline date. Thus, EPA cannot interpret the State's definition as establishing impact area baseline areas.

Option 2: The State could adopt a new definition of "baseline area" reflecting the State's intent to establish source impact area baseline areas, which would be established at the date of application for the PSD permit.

In the August 7, 1980 Federal Register in which EPA promulgated revised PSD regulations pursuant to the *Alabama Power* court decision, EPA clearly stated that the baseline area should be defined as the area designated as attainment or unclassifiable under section 107(d) of the Act in which a PSD source or modification would construct or have a significant impact in (see 45 FR 52715). While EPA received numerous comments favoring a source impact area baseline area, EPA concluded that the area had to be designated under section 107(d) of the Act based on the language in section 169(4) of the Act (which refers to "an area subject to this part") and the *Alabama Power* court opinion (see 45 FR 52715). However, as discussed in the August 7, 1980 Federal Register, EPA decided "to allow flexibility to States, not by accepting alternative definitions in SIPs, but by defining baseline area in such manner as to allow flexibility" (see 45 FR 52726, 3rd column). Specifically, flexibility in redefining baseline areas is inherent in the State's authority to redesignate areas under section 107 of the Act. Thus, EPA could not approve as part of the SIP a revised "baseline area" definition, as suggested by the State. Instead, the State will have to submit section 107 redesignations to change a minor source baseline date.

In your May 9 letter, you questioned whether it was the intent of 40 CFR part 81 to list PSD baseline areas. The purpose of 40 CFR part 81 is to list areas promulgated under section 107 of the Act. Subpart C of 40 CFR part 81 lists the attainment status designations of areas pursuant to section 107 of the Act. In addition, 40 CFR 81.300(b) further clarifies that areas listed as attainment or unclassifiable for particulate matter, SO_2, and NO_2 represent potential baseline areas or portions of baseline areas which are used in determining compliance with PSD increments. So, the reference to "areas designated under section 107(d)(1)(D) or (E) of the Act" in the federal definition of "baseline area" is referring to those areas designated as attainment and unclassifiable in 40 CFR part 81.

Option 3: Redesignate Montana into practically sized areas under 40 CFR 81.327, such as townships or counties. When new PSD sources trigger the minor source baseline date in an area, the State would submit redesignation requests to encompass the 1 ug/m^3 impact area of the source.

The only way the State can untrigger the minor source baseline date for any of the three PSD increment pollutants is to submit to EPA redesignation requests under section 107 of the Act. The State has complete discretion to submit such redesignation requests. However, certain requirements must be met in order for EPA to approve such requests as was discussed in our September 14, 1995 letter. Specifically, attainment or unclassifiable area redesignations under section 107(d) must meet the following conditions:

1. the boundaries of any area redesignated cannot intersect the 1 ug/m^3 impact area of any major stationary source or major modification that established the minor source baseline date for the area proposed for redesignation; and

2. baseline area redesignations can be no smaller than the 1 ug/m^3 impact area of such sources.

In addition, please note that, in accordance with our regional tribal policy, EPA will need to consult with all of the tribes affected in Montana prior to approving a redesignation request. Also, EPA will have to act on its own authority to redesignate tribal lands located within the boundaries of any new section 107 areas for which the State has requested redesignation.

So, for any redesignation request that the State submits, whether it is to set up county-wide baseline areas, township-wide baseline areas, or baseline areas that encompass the 1 ug/m^3 impact area of a source, the State will need to submit information that will enable EPA to determine whether the above requirements are met. Note that the minor source baseline date is set by the first complete PSD permit application in an area, whether or not that source is constructed, the permit is denied, or the application is withdrawn (see 45 FR 52717, August 7, 1980). Thus, EPA will need information on any PSD source that submitted a complete PSD permit application after the trigger date.

If the State wants to redesignate areas based on source impact areas, EPA will need a significant amount of documentation to approve such a redesignation. We will need to see information on the assumptions made for the modeling of the 1 ug/m^3 impact area, the modeling input files, and the isopleth maps showing the significant impact areas for all of the PSD sources that would have triggered a minor source baseline date. Depending on the level of modeling done for the PSD permit application, we may require the modeling to be redone with more current models and/or emission factors. This information is necessary so that EPA can adequately determine that the area to be redesignated is not smaller than the 1 ug/m^3 impact area of the source. Please note that EPA could generally accept more

conservative, less resource-intensive, modeling demonstrations, such as a screening model. Last, the State would need to provide a legal boundary definition for the area that encompassed the 1 ug/m^3 impact area of the source, which EPA would promulgate in 40 CFR part 81.

If the State wants to redesignate areas based on townships, we may need similar amounts of information, depending on how large the townships are and where the PSD sources are located. However, if the State decides to redesignate to county-wide baseline areas, it is more likely that we will not need as much documentation on the source impact areas except for the sources located close to county line boundaries. In order to determine how much documentation will be required for county-wide or township-wide area designations, EPA suggests that the State first submit a map to EPA showing the boundaries of the areas to be redesignated, the location of all PSD sources that could have triggered a minor source baseline date, and the operating parameters for each source. Then, depending on the source parameters and how far the boundaries of the area to be redesignated are from the source, EPA will determine whether we need to see modeling information for specific sources. Please note that, if a source triggering the minor source baseline date has an impact area that transcends county or township boundaries, EPA will have to designate those two (or more) counties or townships as one area under section 107 of the Act. However, if that has occurred, the State could simply designate the county (or township) that the source was located in and the portion of the adjoining county (or township) that the source impacts as one area, if the State did not want the entire adjoining county (or township) to be triggered.

In answer to the last question of your letter, if the State wanted to designate townships as separate areas, we believe we could generically list "all legally defined townships" rather than list each township in 40 CFR part 81, with a few exceptions: In the case where a PSD source impacted more than one township, EPA would have to separately list those townships as one area in 40 CFR part 81. In addition, if the townships are not all contiguous and there is an area in between the townships, we'll probably have to designate the "in between" areas as the "remainder of county" (e.g., see Iowa's designations at 40 CFR 81.316).

For your information, EPA Region VIII has surveyed many of the other regions to see how other States are setting up baseline areas. While we did not hear from all regional offices, we are not aware of any States that are operating their PSD program based on source impact area baseline areas. That is probably due to the significant amount of work that is involved in setting up impact area baseline areas and because of the "triggering, redesignation, untriggering" process that would have to be done for future PSD sources. Of those States that have set up smaller than State-wide baseline areas, the majority have set up county-wide areas. EPA Headquarters' opinion was that county-wide baseline areas would be easier for a State to administer than township areas, especially if the townships were not contiguous and there were "in between" areas. In addition, the State may want to consider

designating areas based on airsheds, although that could take a fair amount of work to set up. In any case, the State has complete discretion to redesignate the boundaries of any attainment/unclassifiable area under section 107 of the Act, as long as the requirements mentioned above are met.

I hope this letter adequately addresses your May 9, 1996 letter. We tried to provide you with all of the information we know about this issue, so that you can make a well-informed decision on how to manage the tracking of air quality deterioration in your State. If you have any questions on the information in this letter or if you want to discuss further, please contact me at 312-6005 or have your staff contact Vicki Stamper at 312-6445. Since I know you want to redesignate areas as soon as possible, I highly recommend that you keep us informed and provide your draft redesignation plans to EPA for review, because preparation and approval of these redesignation requests can be very complicated.

Sincerely,

Richard R. Long, Director
Air Program

Enclosure

cc: Chuck Homer, Permitting and Compliance Assistance Division, MDEQ
Gretchen Bennitt, Planning, Prevention, and Assistance Division, MDEQ

ENCLOSURE

EPA's Interpretation of Baseline Areas and Minor Source Baseline Dates in Montana:

EPA understands that the State has intended to implement its particulate matter increments on a source impact area baseline area. However, the State has not been following all of the requirements to properly implement its program in that manner, as was discussed in our September 14, 1995 letter. Currently, a legal interpretation of the State's definition of "baseline area" is that it is every part of those attainment or unclassifiable areas listed in the State's designation tables in 40 CFR 81.327 in which the source establishing the baseline date would construct in or would have an ambient impact greater than or equal to 1 ug/m^3. For PM-10, those areas designated in 40 CFR 81.327 include the Great Falls area, the East Helena area, the Colstrip area, the Billings area, and the "Rest of State" area (which excludes all of the areas listed above as well as all of the PM-10 nonattainment areas in the State). The "minor source baseline date" is then set for a baseline area upon the first date after the "trigger date" for a specific pollutant when a complete PSD permit application was submitted for a source which would emit that pollutant in significant amounts. Thus, based on the State's definitions in its PSD rules (as well as EPA's PSD definitions), we believe the particulate matter minor source baseline date has been triggered for the "Rest of State" area by the Asarco-Troy project in 1979. (Note - we have not determined whether the minor source baseline date has been triggered for the other PM-10 unclassifiable areas listed above.)

For the sulfur dioxide increments, EPA believes there are two PSD baseline areas in the State as listed in 40 CFR 81.327: the Anaconda area and the "Rest of State" area (which excludes the Anaconda area and the State's SO_2 nonattainment areas). For the nitrogen dioxide (NO_2) increments, EPA believes the State is operating on a Statewide baseline area, based on the designation in 40 CFR 81.327. The State had initially set a Statewide minor source baseline date in its PSD regulations as March 26, 1979 for all SO_2 areas and as February 8, 1988 for all NO_2 attainment areas. In December 1993, the State deleted the regulatory Statewide baseline dates for these two pollutants, and the State's revised definitions of minor source baseline date and baseline area are now basically identical to the federal definitions in 40 CFR 51.166(b)(14)(ii) and (b)(15). However, even though the State deleted the specific regulatory Statewide baseline dates for NO_2 and SO_2, the baseline areas for these pollutants are still defined as those attainment and unclassifiable areas listed in 40 CFR 81.327 in which a PSD source proposes to locate or would have a significant impact. Thus, EPA believes the NO_2 minor source baseline date was triggered for the entire State by Continental Lime in 1990, and EPA believes that the SO_2 minor source baseline date was triggered for the "Rest of State" area by the Montana Power Company - Colstrip plant in 1979. (We have not yet determined whether the minor source baseline date has been triggered for the Anaconda SO_2 area.)

Thus, for the majority of the State, EPA believes the minor source baseline dates are currently triggered for particulate matter, SO_2, and NO_2.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

Ref: 8P-AR

AUG - 6 1998

Robert Raisch, Chief
Resource Protection Planning Bureau
Planning, Prevention & Assistance Division
Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901

Dear Bob:

I am writing to give you our initial comments on Montana's proposal to redesignate the State's prevention of significant deterioration (PSD) attainment and unclassifiable areas, which was submitted in draft form by Robert Habeck of your staff on May 21, 1998. Specifically, the State is proposing to divide the State into 4000+ attainment/unclassifiable areas of 10 kilometer (km) by 10 km squares defined by Universal Transmercator (UTM) coordinates for the three pollutants with PSD increments - sulfur dioxide (SO2), particulate matter (PM-10), and nitrogen dioxide (NO2). The State's intent is to untrigger the minor source baseline date for SO2, PM-10, and NO2 in as much of the State as possible (i.e., all of the areas not significantly impacted by the existing PSD sources that triggered or would have triggered minor source baseline date), and to ensure that future PSD sources only trigger the minor source baseline date in a small area around the source (i.e., the 100 km^2 grid where the source locates and those where it has at least a 1 ug/m3 impact).

As you know, the issue of minor source baseline dates, baseline areas, and increments can be very complicated and confusing. As background for understanding our comments, we have included a discussion in Enclosure I regarding the purpose of the PSD requirements of part C of the Clean Air Act (Act) and an explanation of EPA's regulations regarding PSD increments. You may want to refer to that discussion for further explanation of the following comments on the State's draft proposed redesignation request.

The minor source baseline dates for SO2 and PM-10 were triggered in the "rest of State" unclassifiable/attainment areas in 1979 and for NO2 statewide in 1990. All growth in emissions since those dates has been consuming the available increment for the majority of the State. The State's proposed redesignation request would untrigger the minor source baseline date in all 100 km^2 areas in which no PSD source has located or significantly impacted. Thus, all of the emissions from minor/area sources that had been consuming PSD increment (and possibly limiting growth in emissions in some parts of the State) would become part of the baseline concentration in those areas where minor source baseline date is untriggered by this redesignation. In addition, all future growth in minor source emissions in each 100 km^2 area will continue to be part of the baseline concentration (and thus not consume the available increment) unless and until a new PSD permit application is filed for a source proposing to locate in, or proposing to significantly impact,

the 100 km^2 area. Thus, the State's proposed redesignation will allow greater deterioration of air quality in clean air areas by minor source emissions than is currently allowed under the State's PSD rules and section 107 area designations.

The preamble to EPA's August 7, 1980 PSD regulations does provide for redesignation of section 107 areas into smaller areas in order to untrigger the minor source baseline date, as long as no PSD source has located in or significantly impacted the area to be redesignated (see 45 FR 52726). While it appears that the State's proposal is consistent with these requirements, EPA is concerned with the impact that this proposed redesignation would have on air quality in the State for numerous reasons.

First, EPA is concerned with the impact that the State's proposed redesignation could have on the State's ability to attain and maintain the new PM-2.5 NAAQS. EPA believes it is necessary that States maintain current PM-10 implementation efforts for purposes of protecting public health during the transition to implementing the revised PM NAAQS. To that end, EPA's December 29, 1997 "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM-10 NAAQS" indicates EPA's intention to interpret section 110(l) of the Clean Air Act to preclude the delay, removal, or relaxation of a control measure approved into the SIP without a demonstration that such a revision would not adversely affect the ability of the State to prepare a SIP that satisfies the requirements for attainment and maintenance of any NAAQS, including the revised PM-2.5 NAAQS. While we are not aware that the State plans to relax any specific emission limitation previously imposed as a result of this redesignation request (although we would like to receive confirmation of that from the State), this still is considered to be a relaxation of the State's PSD program which will allow increased degradation of air quality. Thus, we will need to consider this December 29, 1997 policy in determining approvability of this proposal. A demonstration that the new PM NAAQS won't be adversely impacted by this action may be required of the State.

Second, this action would untrigger the minor source baseline date for PM-10, SO2, and NO2 in many of the State's mandatory Class I areas. For example, in Glacier National Park where minor source growth has been consuming PM-10 and SO2 increment since 1979 (and thus potentially limiting growth in air emissions in some areas), all of the minor source growth that has occurred in the last 19 years would become part of the baseline concentration for that area and the available increment would be expanded by the State's redesignation. In addition, the baseline concentration would continue to grow due to minor source growth until the minor source baseline date was triggered for the 100 km^2 areas of the park. This loss of protection for Class I areas will have significant consequences. In the early years of the PSD program, minor source growth wasn't recognized as a significant factor in air quality degradation. Twenty years' experience has shown, however, that development of minor sources (e.g., the oil and gas industry) causes increased levels of air pollution that may have adverse impacts on air quality in attainment areas. Because this proposed redesignation would allow increased deterioration of air quality in many of the State's Class I areas (to the point where air quality could be allowed to deteriorate all the way to the NAAQS), EPA believes the State at least must consult with the Federal Land Managers

(FLMs) for the lands affected by this redesignation. From EPA's perspective, this proposal appears to run counter to Congressional intent to "preserve, protect, and enhance air quality in national parks [and] national wilderness areas," as expressed in section 160 of the CAA. Offering the FLMs the option of retaining the already triggered minor source baseline date for their Class I areas would be a possible solution to this dilemma.

Third, this action would also untrigger the minor source baseline date for many of the Indian reservations that are within the State's boundaries, including the Class I Indian reservations. With the exception of nonattainment area designations, EPA historically has not promulgated separate section 107 area designations for Indian reservations. Thus, for PSD purposes, EPA has considered the minor source baseline date to be triggered for an Indian reservation if it was triggered for the section 107 area surrounding the Indian reservation. In Montana, most of the Indian reservations were included within the "rest of State" section 107 area designation. So, EPA has considered the minor source baseline date for the Indian reservations in Montana to have been triggered in 1979 for SO2 and PM, and in 1990 for NO2. (Note that it appears no PSD sources have located in any Indian reservations within Montana, so the triggering of the minor source baseline date for all reservations in Montana is contingent upon sources in the State's section 107 areas.)

The State is proposing in its redesignation request to exclude all Indian reservations from the State's section 107 area redesignations. This may not be allowed under our PSD regulations for some of the reservations because, if an Indian reservation is significantly impacted by a PSD source (such as the Crow Reservation and the Northern Cheyenne Reservation being impacted by the Colstrip PSD facilities), the minor source baseline date cannot be untriggered for that reservation. In any case, even if the State were not to exclude the Indian reservations from its section 107 areas, the proposed redesignation request would untrigger the minor source baseline date in many of the reservations. We believe that the tribes should have the ability to retain the minor source baseline date for their reservations, especially for reservations that have reclassified to Class I. Thus, we believe all of the tribes within the State of Montana must be consulted with regarding this redesignation request. EPA could take the lead in consulting with the tribes, but we believe it would be beneficial for the State also to be involved in the consultation process.

Fourth, the State should also consider the impact that this proposed redesignation will have on the State's ability to meet the forthcoming regional haze requirements, which were proposed for public comment on July 31, 1997 (62 FR 41138-60), as well as the State's ability to protect visibility in Class I areas, as required by section 169A of the Act.

It is important to note that EPA would consider all of these issues relevant whether the State was redesignating to county-wide, township-wide, or 10 km^2 areas (all of which have been discussed at one time or another by the State), although the State's current proposal is the most extreme of these three redesignation proposals since it would untrigger minor source baseline date in more areas of the State than the other two proposals. Our previous experience in redesignating

section 107 areas to untrigger the minor source baseline date has been for only one part of a State and, in that case, the redesignation did not affect any Class I areas or Indian reservations.

EPA also has several technical concerns with the State's proposal that need to be addressed, as discussed in Enclosure II of this letter. However, there is one very significant issue I want to highlight. In order to properly redesignate any area under section 107 of the CAA, EPA will need to define each specific area by legal definition in 40 CFR part 81. These areas need to be defined in a legal manner, so that a person can determine which section 107 area they are in. The State is proposing to use UTM coordinates to define these areas. However, there are three different UTM zones in Montana. Because this projection takes into account the curvature of the earth, the 100 km^2 squares do not meet at equal distances between UTM zones. Thus, it is very difficult to legally define the 100 km^2 areas by UTM coordinates at the boundaries of the UTM zones. The State may need to devise some other method for legally defining those areas. One option may be to use boundary definitions based on Township and Range, if the entire State has been platted in this manner. In addition, the State will need to legally define the 1 ug/m3 impact areas, because those will have to be designated as separate section 107 areas where the minor source baseline date is considered to be triggered.

Because of the many issues associated with the State's proposed redesignation request, it seems a good idea to have a conference call or meeting to discuss the State's plans for proceeding with this redesignation request and, especially, the State's schedule for adopting these changes to its PSD program. Note that this redesignation request would be considered to be a revision to the State Implementation Plan and thus must go through a public comment period and hearing. We believe that the consultation with the tribes and the FLMs needs to be initiated well in advance of the State's public hearing on this redesignation. Please contact me at (303) 312-6005 after you have reviewed this letter and are ready to discuss this further. If your staff have questions on the issues discussed in this letter or in the enclosure, they should contact Vicki Stamper at (303) 312-6445.

Sincerely,

Richard R. Long, Director
Air and Radiation Program

Enclosures

cc: Don Vidrine, Chief
Air and Waste Management Bureau, MDEQ

Bob Habeck,
Resource Protection Planning Bureau, MDEQ

APPENDIX D
EPA LETTERS REGARDING DE MINIMIS RULE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

Ref: 8P-AR

OCT - 9 2002

Board of Environmental Review
P.O. Box 200901
Helena, Montana 59620-0901

Dear Board Members:

The purpose of this letter is to provide EPA's comments on the revisions to the State's rule "Permit, Construction and Operation of Air Contaminant Sources," codified in ARM Title 17, chapter 8, subchapter 7 and other rules being revised to conform to the revised subchapter 7. We understand that the Board will be considering these revisions, including the adoption of new Rules I through XVIII, at the Board's October 10, 2002 public hearing. The enclosure to this letter includes our comments on the rule changes identified in the MAR Notice No. 17-165, 15-8/15/02.

The Clean Air Act (Act) establishes a shared responsibility between EPA and States to protect air quality. States adopt rules to protect air quality, including the National Ambient Air Quality Standards (NAAQS), and we approve the rules into the State Implementation Plan (SIP) if they meet the Act's requirements. The enclosed comments identify provisions in the New Rules that we believe we cannot propose to approve into the SIP. In most cases we have attempted to identify how a rule might be revised so that we could propose to approve it into the SIP. Additionally, our comments identify editorial corrections.

If you have questions about these comments or if you want to discuss these issues in further detail, please feel free to contact me at (303) 312-6005, or have your staff contact Laurie Ostrand at (303) 312-6437.

Sincerely,

Richard R. Long, Director
Air and Radiation Program

Enclosures
cc: John Wardell, 8MO
Don Vidrine, MDEQ

Enclosure

A. SIP Approvability Comments

(1) **New Rule XI** - We have had, and continue to have, a concern that the permitting rule only provides for a 15 day public review of preliminary determinations on permits. As we have indicated before, we believe this timeframe is too short for the public and EPA to provide comments, particularly for complex permitting actions. Given these concerns, and the discussion below, we believe it is in the State's best interest to revise the public comment period to 30 days.

Since we previously approved the 15-day comment period, it may be helpful if we describe the basis for our current concerns. We originally approved the 15-day comment period into the SIP over 20 years ago. Although our regulations normally require that SIPs include a 30-day comment period for permit actions, our rules also allowed us the discretion to approve a shorter comment period where existing State regulations already included a comment period less than 30 days. See 40 CFR 51.161(b) and (c). We exercised this discretion in approving Montana's 15-day comment period. However, in the intervening years this shortened comment period has caused us problems on a number of occasions. We have found it difficult to supply adequate review and comment to the State on preliminary permit determinations, particularly when complex issues have been involved or when we have had misunderstandings with the State. Given our own difficulties, we have also questioned whether this abbreviated comment period would provide an adequate opportunity for comment to other affected States and federal agencies and the public. Thus, when the Board proposed revisions to the permitting rules on February 14, 2002, we took the opportunity to express our concerns regarding the 15-day comment period and ask that it be lengthened to 30 days. See our April 2, 2002 letter. The proposed revisions do not address our concerns, and thus, we are reiterating our request.

As you are probably aware, we also recently received a petition from Environmental Defense and Land and Water Fund of the Rockies that, among other things, alleges that the 15-day comment period is inadequate and demands that EPA issue a SIP call requiring the State to revise the comment period to at least 30 days. We have made no decision yet regarding this request for a SIP call or any other aspect of the petition. We intend to complete a thorough evaluation of the issues raised by the petitioners over the coming weeks, but your current rulemaking offers the opportunity to resolve one of the petitioners' concerns, and our coincident concern, in the near term. We think such a resolution would be beneficial to all involved.

Incidentally, we are under the impression that the 15-day comment period may be considered necessary due to the Montana statutory and regulatory requirement that a final decision be made within 60 days of receipt of a complete permit application. On the one hand we do not believe this time constraint should dictate the length of public comment period; it is essential that adequate opportunity for public comment be provided regardless of State-imposed deadlines on permit issuance. On the other hand, as we have considered this matter, we have begun to question whether 60 days is an adequate amount of time to issue complex permitting actions. EPA's rules only require that a preliminary determination on a PSD permit be issued

within one year after receipt of a complete permit application (see 40 CFR 51.166(q)), and our experience indicates that permit applications often raise complex issues that require significantly more than 60 days to adequately address. We recognize that a change to the 60-day period may require legislative action, but we thought it best to raise the issue now so that we can begin to explore the issue more fully and determine whether a change should be pursued.

(2) We believe the New Rules do not clearly indicate how they apply to major source permitting. Because of this, we believe we could not propose to approve several definitions and provisions of the New Rules, mentioned below, because these definitions and provisions would be inconsistent with requirements for major source permitting. We believe we could propose to approve these definitions and provisions if they were revised to indicate that they do not apply to sources subject to subchapters 8, 9 or 10. We suggest subchapter 7 be amended to provide this clarification.

(a) **New Rule II(14)** - definition of "Routine maintenance, repair, or replacement." For major source permitting we see the determination of routine maintenance, repair, or replacement as a case specific process and one that cannot be generally defined. Based on our past determinations, routine activity has a narrow scope and should generally be applied only to actions that are regular, customary, repetitious, and undertaken as standard practice to maintain a facility in its present condition. The determination of whether a proposed modification is "routine" is a case-specific determination which takes into consideration the nature, extent, purpose, frequency and cost of the work, as well as any other relevant factors. See Memo from Don R. Clay, Acting Assistant Administrator for Air and Radiation, to David A. Kee, Director, Air and Radiation Division, Region V, September 9, 1988, enclosed. We believe that the State's proposed definition for "routine maintenance, repair, or replacement" does not assure that all appropriate factors are considered in determining whether or not a proposed project is considered to be routine maintenance, repair or replacement and, subsequently, is exempt from permitting requirements for modifications.

(b) **New Rule II(2)** - definition of "Construct" or "construction." This definition includes the phrase "a reasonable period of time for startup and shakedown." Because of this phrase, New Rule II(2) is not consistent with the same term used in major source permitting. See ARM 17.8.801(10), ARM 17.8.901(6) and 40 CFR 51.166(b)(8).

(c) **New Rule IV(1)(f)** - general exclusion for emergency equipment installed in industrial or commercial facilities. Since there are no restrictions on the size, emissions, or duration of time emergency equipment may be used, emergency equipment excluded from permitting in Subchapter 7 may be a major source and subject to major source permitting.

(d) **New Rules VII(2) and XIII(2)** - These provisions allow for a 5 year extension of a specified effective date in a permit or a 3 year upper limit on the expiration date of a permit for not constructing or installing, respectively. The Federal PSD requirements in

40 CFR 52.21(r)(2) specify that a PSD permit will expire after 18 months if construction is not commenced within 18 months.

(3) **New Rule V** - exclusion from permitting for de minimis changes. We are concerned that the rule could allow sources to violate major and minor source preconstruction permitting requirements, as well as the State Implementation Plan. We identified these concerns in prior correspondence.[1] We believe we cannot propose to approve New Rule V unless changes are made and additional information identified below is provided. New Rules (II)(8), (X)(1) and XV(1)(b) also refer to New Rule V. We believe we also cannot propose to approve New Rules (II)(8), (X)(1) and XV(1)(b) unless the changes identified below are made to New Rule V .

(a) Change New Rule V(1)(a) to read: (a) Construction or changed conditions of operation at a facility for which a Montana air quality permit has been issued that do not increase the facility's potential to emit by more that 5 ~~15~~ tons per year of any pollutant, except x[2] tons per year of lead, except:"

(b) Change New Rule V(1)(a)(i) to read: (i) any construction or changed conditions of operation at a facility that would violate any condition in any statute, the facility's existing Montana air quality permit, ~~or~~ any applicable rule contained in this chapter, or the State Implementation Plan (SIP) is prohibited, except as allowed in (2);

(c) Change New Rule V(1)(d) to read: (d) If a notice is required under (1)(b), the owner or operator shall submit the following information to the department in writing at least 10 days prior to construction ~~startup or use~~ of the proposed de minimis change or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change:

(d) Change New Rule V(2) to read: (2) A Montana air quality permit may be amended pursuant to [NEW RULE XV], for changes made under (1)(a)(i) that would otherwise violate an existing condition in the permit. Conditions in the permit concerning emission limits or production limits in lieu of emission limits, control equipment specifications, operation procedures, or testing, monitoring, record keeping, or reporting requirements may be modified if the modification does not violate any statute, rule, ~~or~~ the state implementation plan, or BACT/LAER requirements for major or minor sources. ~~Conditions in the permit establishing emission limits, or production limits in lieu of emission limits, may be changed or added under (1)(a), of the owner or operator agrees to~~

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[1]On February 12, 1999 we sent a letter to Don Vidrine and on April 1 and May 13, 1999 we sent letters to the Montana Board of Environmental Review expressing concerns with the De Minimis Rule. Copies of these letters are enclosed.

[2]The value of "x" should be at some level below the significance level of lead for major stationary sources, i.e., 0.6 tons per year.

~~such changes or additions.~~

(e) Finally, pursuant to 40 CFR 51.160(e), the State should also submit information regarding the basis for the exemption, and demonstrate that compliance with the NAAQS will not be compromised under this rule.

(4) **New Rule VII(5)** - "state-only" conditions in a Montana Air Quality Permits. Currently, terms and conditions set forth in permits issued under a SIP-approved permit program (e.g., permits issued under subchapter 7) are federally enforceable. Before we could propose to approve a provision that changes the SIP-approved permit program to allow for inclusion of permit terms that are non-federally enforceable a justification as to why certain provisions do not warrant federal (and citizen) review and enforceability would need to be submitted with the rule revision. Additionally, the State should demonstrate in the submittal that the proposed State-only terms will not hamper the ability of the State to enforce the SIP approved aspects of the NSR permits. We question what types of provisions in these particular permits the State would consider as not federally enforceable. Without more details on how this particular program change would be implemented so as to ensure continued compliance with all provisions in the SIP, we have potential backsliding concerns (section 110(l) of the Act) with this provision.

(5) **New Rule III** (subsections (2)-(5)) allows certain construction activities prior to receiving a permit. Based on EPA's existing rules and policies, we do not believe we could propose to approve New Rule III (subsections (2)-(5)) as written. Specifically, we believe these provisions are inconsistent with section 110(a)(2)(C) of the Clean Air Act and 40 CFR 51.160, including 40, CFR 51.160(b), which requires States have legally enforceable procedures to prevent construction or modification of a source if it would violate any SIP control strategies or interfere with attainment or maintenance of the NAAQS.

We were provided a table entitled "States Allowing Pre-Permit Construction." The table identifies several states with rules that allegedly allow pre-permit construction activities. After examining the rules from the other States identified in the table, we do not believe the table supports New Rule III, subsections (2)-(5), as a SIP-approvable rule. Three of the states (Idaho, Michigan and Utah) require administrative approval by the State before construction can begin (Idaho's DEQ issues written approval to the source that makes potential to emit limits requested by the source enforceable, Michigan's Commission may grant a waiver from the construction permit prior to full construction approval, and Utah's executive secretary issues an "approval order" (a permit) prior to construction). Minnesota's rule only applies to "de minimis" permit modifications (the rule includes pollutant thresholds for the criteria pollutants), and New Jersey's rule only allows pre-construction if not prohibited by Federal Law (N.J. Admin. Code 7:27-22.3(oo)(2)). Oklahoma's rule pertains to major source operating permits (Title V). The Oklahoma rules contain numerous restrictions and limitations to ensure the minor permit modifications do not violate any SIP control strategies or interfere with attainment or maintenance of the NAAQS (OAC 252:100-8-7.2(b)(1)(A)(I)(I-V). Regarding the North Dakota rule cited, we plan to research its implications.

(6) **New Rule XIV** allows the state to "revoke a permit *or any portion of a permit* upon written request of the permittee, or for violation of any requirement..." We are concerned that applicable provisions may be inadvertently revoked at the request of the permittee. We believe we could propose to approve the rule if it were revised to indicate that permittee initiated revocations may be approved provided that the provisions revoked are not applicable requirements of subchapters 7, 8, 9 or 10.

(7) **New Rule XVI(3)** - allows a permit transfer of ownership and/or location to be deemed approved if the department does not approve, conditionally approve or deny a permit transfer within 30 days of receipt of a notice of intent. We are concerned that a source may inappropriately locate in an area and jeopardize attainment of the NAAQS. The permit transfer may be deemed approved if the department does not act within 30 days. We believe we could propose to approve New Rule XVI(3) if it were revised to read: "...the transfer is deemed approved, except for transfers of locations to areas where a source could cause or contribute to violations of the NAAQS."

(8) Several provisions of the New Rules appear to be a relaxation of the existing rules in the SIP. Before we could propose to approve these revisions the State will need to submit an analysis showing that the relaxations will not interfere with attainment and reasonable further progress, or any other applicable requirement of the Clean Air Act (Act). See section 110(l) of the Act. Specifically:

> (a) In **New Rule II(1)**, the definition of Best Available Control Technology (BACT), the State proposes to change "shall" to "may." This change is inconsistent with the federal definition of BACT (40 CFR 51.166(b)(12)). One potential way to address this concern is to revise New Rule II(1) to indicate that it does not apply to major source permitting.
>
> (b) **New Rule III(1)(b)** requires a permit for "asphalt concrete plants, mineral crushers, and mineral screens that have the potential to emit more than 15 tons per year of any airborne pollutant, other than lead, that is regulated under this chapter." The existing ARM 17.8.705(1)(o) requires a permit for these same sources with a potential to emit more than *5 tons per year*. We believe replacing a rule that requires sources emitting more than 5 tons per year to obtain a permit with a rule that requires permitting for sources emitting more than 15 tons per year is a relaxation of the existing SIP.

(9) **New Rule II(6)** - definition of "Facility." We are concerned that the phrase "that contributes or would contribute to air pollution" may not be as restrictive as the phrase "that emits or has the potential to emit air pollution." We are concerned that someone may emit air pollution but believe they do not contribute to air pollution. Therefore, we believe the phrase "that contributes or would contribute to air pollution" should be replaced with "that emits or has the potential to emit air pollution."

(10) **New Rule XV** allows administrative amendments to permits. New Rule (1)(b) allows amendments to permits so long as there is no increase in emissions. We are concerned that even

though there may not be any increase in emissions some permit amendments should receive public review. With respect to administrative amendments that do not impact the emission limit, we believe our concern could be addressed and we could propose to approve this provision, if it were revised to indicate that "The department may amend a Montana air quality permit, or any portion of a permit, provided the amendment does not violate any requirement of an applicable statute, rule or State Implementation Plan or effect the enforceability of an emissions limit, for the following reasons:" Changes that could effect the enforceability of an emissions limit include, for example, changes in testing and monitoring methods, frequency of testing, and reporting requirements. However, we want to clarify public review requirements for administrative amendments for changes in operation that result in decreases in emissions. We believe that any amendment to decrease an emissions limit, for example, to create a synthetic minor or to avoid other requirements, should go through public review for the limit to be federally enforceable. We understand that the DEQ may be using the administrative amendment provisions to decrease emission limits. If this is the case, in addition to the changes mentioned above, additional changes should be made to the rule to ensure that decreases in emission limits go through public review and thus become federally enforceable.

B. Editorial Comments

1. New Rule II(8)(a) and (c), we believe the reference to New Rule IV should be to New Rule V.

2. New Rule II(8)(b), we believe the reference to New Rule II should be to New Rule III.

3. New Rule IV(1)(j), we believe the reference to ARM 17.8.110(7) should be changed to ARM 17.8.110(7) through (9).

4. ARM 17.8.110(9), we believe the reference to (7)(a) should be changed to (7)(a) and (b).

5. ARM 17. 8.818 and 17.8.1004, we believe the references to New Rule IV should be changed to New Rule IV and V.

6. ARM 17.8.1004, there are two references to ARM 17.8.710 being removed from this rule. We believe one of the references to ARM 17.8.710 should be revised to ARM 17.8.720.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466
http://www.epa.gov/region08

MAY 13 1999

Ref: 8P-AR

Jim Wheelis, Hearing Officer
Montana Board of Environmental Review
P.O. Box 200901
Helena, Montana 59620-0901

Re: Proposed Revisions to Montana's De Minimis Rule

Dear Mr. Wheelis:

I am writing to followup on my April 1, 1999 letter to Joe Gerbase, in which we provided comments and recommendations for improvement on the proposed revisions to Montana's de minimis rule in Sections 17.8.705 and 17.8.733 of the Administrative Rules of Montana (ARM). Through discussions with you and the Department of Environmental Quality (DEQ), we understand that most of our comments are outside the scope of the public notice. In fact, we understand that the Board mainly has the option to either adopt the rule changes as proposed or not adopt any revisions to the de minimis rule. In addition, the DEQ has informed us of other provisions in the State's permitting regulations that may address some of our concerns with the de minimis rule. Based on these discussions, we want to inform you and the Board of Environmental Review that we support the Board's adoption of the revisions to the de minimis rule. However, we cannot guarantee approval of this rule, as discussed below.

The proposed revision to the de minimis rule that requires advance notification to the DEQ prior to startup or use of a de minimis change greatly strengthens the pre-existing rule, as the pre-existing rule does not require any advance notification to the DEQ. This change is necessary so that the DEQ can determine whether a modification at a source is truly de minimis prior to the source making the change. We still believe that this notification should occur at least 10 days prior to commencing construction (or prior to beginning on-site activities for a change in the method of operation), so that the State will be able to prevent construction or modification of a source that should be subject to major source permitting requirements or that would cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS) or the State's control strategy. However, given that you believe this change is outside the scope of the public notice, we support the Board adopting this change to the de minimis rule as proposed rather than not adopting the revisions at all.

While we have been discussing this rule revision with our Headquarters' offices and some of the regions, we have not yet been able to determine whether the issue of the timing of the notification to DEQ will be an issue for approvability. Neither EPA's regulations or policy address these types of de minimis exemptions from minor source permitting programs, and we

need to evaluate the impacts that such exemptions could have on Clean Air Act requirements. In addition, because this de minimis rule will be a relaxation of the existing EPA-approved SIP (which does not provide for any de minimis exemptions from permitting requirements), the DEQ will need to submit information explaining the basis for these exemptions pursuant to 40 CFR 51.160(e) and demonstrating that compliance with the NAAQS will not be compromised under this rule. Thus, while we support the changes to the de minimis rule because they strengthen the rule, we cannot at this time guarantee acceptance when this rule is submitted to us as a State Implementation Plan (SIP) revision. Once the complete SIP revision package is submitted to us, we will fully consider the State's response to our comments and discuss the rule with our Headquarters Offices.

If you have any questions on this letter, please contact me at (303) 312-6005 or Vicki Stamper of my staff at (303) 312-6445.

Sincerely,

Richard R. Long, Director
Air and Radiation Program

cc: Montana Board of Environmental Review
Don Vidrine, Montana DEQ
Bob Raisch, Montana DEQ

CC DIGL

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

Ref: 8P-AR

Joe Gerbase, Chairperson
Board of Environmental Review
P.O. Box 200901
Helena, Montana 59620-0901

APR 1 1999

Re: EPA's Review of Montana's De Minimis Rule and its Proposed Revisions

Dear Mr. Gerbase:

We are providing comments on the revisions proposed to the State's "de minimis" rule in Sections 17.8.705 and 17.8.733 of the Administrative Rules of Montana (ARM). This rule allows existing air pollution sources to make certain modifications without having to obtain a preconstruction permit. We are concerned that the rule could allow sources to violate both major and minor source preconstruction permitting requirements, as well as the State Implementation Plan (SIP). These deficiencies could prevent us from approving the revised rule. Following are EPA's recommendations for improving this rule. We discuss our concerns in detail further below.

How could the Board of Environmental Review significantly improve the de minimis rule?

You could adopt several changes to the de minimis rule in this rulemaking that would help to assure that sources do not violate federal permitting requirements or the SIP when claiming de minimis exemptions. While EPA cannot guarantee that these changes would resolve all of our issues, these changes would greatly strengthen the State's de minimis rule:

1. In ARM 17.8.705(1)(r)(iv), require the advance notice to be submitted "at least ten days prior to commencing construction on the proposed de minimis change." The rule should also provide for the State to request further information from a source and to prevent construction on a change while the State is determining whether a change is de minimis.

2. In ARM 17.8.705(1)(r)(i)(E), revise the latter half of this sentence to delete the phrase "...unless such reductions are made federally enforceable."

3. In ARM 17.8.705(2), revise the last sentence of this provision to read "Conditions in the permit establishing emission limits, or production limits in lieu of emission limits, may not be changed or added under (1)(r)."

4. Add a statement in ARM 17.8.705(1)(r)(i) that "Sources in nonattainment areas or areas subject to a SIP call that are proposing to increase emissions of the nonattainment/SIP call pollutant are not de minimis and must meet all preconstruction permitting requirements."

5. Add a new section 17.8.705(1)(r)(i)(F) to state that "any construction or changed conditions that would violate a requirement of the SIP are prohibited."

What are EPA's concerns with the de minimis rule?

The de minimis rule could allow sources to violate major source permitting requirements.

- State review of the de minimis change ten days prior to source operation (as provided for in ARM 17.8.705(1)(r)(iv)) is too late, in most cases, to meet the requirements of our regulations. An owner or operator of a source may think a change qualifies as de minimis, but the State may find that the change requires a major preconstruction source permit. Thus, notice of de minimis modifications must be sent to the State prior to source construction. The State must be able to request more information or prevent construction on a change while the State is determining whether a change is de minimis.

- If a source is proposing a significant emissions increase and wants credit for emission decreases that have occurred, that source must obtain a preconstruction permit that meets all public participation requirements to make these reductions federally enforceable. In addition, EPA's major source permitting regulations require all source-wide creditable increases and decreases that have occurred in the last five years to be included in determining the net emissions increase. The provision in ARM 17.8.705(1)(r)(i)(E) does not meet these requirements. Such "netting actions" should not be exempt as de minimis.

- The de minimis exemptions are based on a different comparison of emissions than under the major source permitting requirements. This could result in faulty implementation of the major source permitting rules. Section 17.8.705(1)(r)(i) of the ARM compares the potential to emit of a source before a modification to the potential to emit of that source after a modification to determine if the increase is less than the 15 tpy threshold. The major source permitting rules generally require comparison of actual emissions before the change to potential emissions after the change.

The de minimis rule could allow sources to violate the SIP or interfere with attainment plans.

- The third sentence of ARM 17.8.705(2) allows emission limits to be changed through an administrative process. It does not state that such limits can't be changed if those limits are specified in the SIP. In addition, while the SIP's control strategy may not specify an emission limit for a source, that source may have been modeled at a certain level of emissions in the attainment demonstration for an area. If the State allows such sources to increase emissions, it could jeopardize an area's attainment strategy.

- In the list of exemptions from de minimis changes in ARM 17.8.705(1)(r)(i)(A)-(E), the State has not exempted changes which would violate the SIP. Under the Clean Air Act,

the State can't change SIP emission limits or other requirements, such as compliance determining methods, without adopting a SIP revision and receiving approval from EPA.

- The 15 tpy de minimis level is the same as or greater than the major modification significance level for two criteria pollutants - PM-10 and lead. Thus, it is difficult to consider this level as having trivial environmental effect. Under the part 70 operating permit program, EPA has allowed activities with emissions of up to 5 tpy to be considered insignificant. The State must explain why it believes increases as high as 15 tpy are considered to have trivial environmental effect when this is submitted as a SIP revision. Alternatively, the State could reduce the de minimis threshold in ARM 17.8.705(1)(r)(i).

<u>The de minimis rule could allow sources to violate preconstruction permit process requirements.</u>

- The Board proposes to add a provision to ARM 17.8.705(2) stating that conditions in the permit establishing emission limits, or production limits in lieu of emission limits, may be changed or added if requested by the applicant. The State is now broadly expanding the scope of this rule, because such changes were prohibited under the previous de minimis rule. Further, the proposed rule does not prohibit changes in emission limits that stem from Federal or State statute/regulation or from the SIP. EPA cannot envision any acceptable circumstance for implementing this provision. Revisions to an emission or production limit previously established in a permit must go through a full permit revision, including State, EPA, and public review. In addition, a source can't violate a SIP emission limit without the State adopting a SIP revision and receiving EPA approval.

- EPA's regulations for minor source permitting programs at 40 CFR 51.160(b) require the State to prevent the construction or modification of a source if such source would cause or contribute to a violation of the NAAQS or interfere with the control strategy. Thus, notice of de minimis modifications must be sent to the State prior to source construction.

We sent comments on these rule revisions to the Department of Environmental Quality on February 12, 1999, and we discussed the comments in a conference call on March 22, 1999. This letter summarizes the most significant issues of our February letter. We encourage you to adopt our recommended revisions to help ensure this rule does not allow modified sources to violate Federal or State requirements. If you have any questions on this letter, please feel free to contact me at (303) 312-6005, or contact Vicki Stamper of my staff at (303) 312-6445.

Sincerely,

Richard R. Long, Director
Air and Radiation Program

cc: Don Vidrine, Air and Waste Management Bureau, MT DEQ
Bob Raisch, Air and Waste Management Bureau, MT DEQ

BC DICK

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

Ref: 8P-AR

FEB 12 1999

Don Vidrine, Chief
Air and Waste Management Bureau
Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901

Dear Don:

The purpose of this letter is to provide EPA's comments on the State's "de minimis rule," codified in Sections 17.8.705 and 17.8.733 of the Administrative Rules of Montana (ARM). We understand that the State is planning to publish a notice for revisions to this rule within the next week and to conduct the public hearing on these rules changes before the Montana Board of Health and Environmental Sciences at its March 24, 1999 meeting. EPA provided comments on the State's initial de minimis rule in a letter dated July 25, 1996, in which EPA expressed some concerns about the types of changes at existing sources the State was exempting from State and public review. In the draft revisions to its de minimis rule, it appears that the State is expanding on the exemptions from new source review (NSR) permitting requirements while, at the same time, adding some safeguards to the process.

Background - New Source Review Requirements and Allowable Exemptions

Like Montana, a number of States across the nation are considering changes to their minor NSR programs to exempt certain minor modifications at existing sources either from public review and comment (or to provide for less than a 30-day public comment period) or from NSR review altogether as Montana is proposing. EPA realizes there are various reasons for these types of program revisions, the most pressing of which seems to be the additional permitting requirements of the part 70 operating permit program. On the other hand, there is a regulatory and statutory mandate for minor NSR programs, and EPA needs to ensure that any revisions to State's NSR programs do not compromise those Federal requirements. In addition, there has been a rising concern with faulty implementation of the prevention of significant deterioration (PSD) and nonattainment NSR permitting programs, especially in determining applicability of major source/major modification permitting requirements. Reducing the scope of changes that are reviewed by permitting agencies under minor NSR programs may add to this problem.

EPA's regulations regarding minor NSR programs are found at 40 CFR 51.160-164 and were promulgated pursuant to section 110(a)(2)(C) of the Clean Air Act (Act). The regulations require that State Implementation Plans (SIPs) include measures to determine whether the construction or modification of a facility, building, structure, or installation will result in a violation of the applicable portions of the State's control strategy or interfere with attainment or maintenance of the national ambient air quality standards (NAAQS) in the State or in a neighboring State. The State must be able to prevent construction or modification in such cases.

(See 40 CFR 51.160(a) and (b).) Thus, in reviewing any exemptions to a State's minor NSR program, EPA must be assured that the exemptions would not interfere with the basic requirement to ensure that new and modified sources do not cause or contribute to a violation of the NAAQS or violate the SIP.

In addition, 40 CFR 51.161 requires that States' NSR programs provide for opportunity for public review and comment on the information submitted by the owners and operators and the State's analysis of the effect of the proposed construction or modification on air quality. Currently, these Federal regulations do not provide for exemptions from the public participation requirements. A strict reading of EPA's regulations would require that all sources subject to a State's permitting requirements also be subject to these public participation requirements.

On August 31, 1995, EPA proposed revisions to the requirements in 40 CFR 51.161 in conjunction with proposing revisions to 40 CFR part 70 (see 60 FR 45530-71). Specifically, EPA proposed to allow States' NSR programs to vary the public review procedures and timing for some construction or modification activities in light of the environmental significance of the activity (including foregoing public review altogether for some changes that have been approved by EPA as "de minimis"). However, EPA's proposed rules provide that States' NSR programs must meet the public participation requirements of 40 CFR 51.161(b)(2) for all new major stationary sources or major modifications subject to PSD or nonattainment NSR permitting requirements, as well as for any physical change or change in the method of operation of a part 70 source where the prospective emissions increases from such change would be a significant emissions increase of any pollutant subject to regulation under part C or D of the Act (i.e., for changes at sources that are "netting out"of major modification review).

The preamble of this proposed rule contains EPA's most recent public statement on the purposes of the minor NSR program, the process for exempting sources from review, and the types of modifications that could undergo less than full public participation requirements. In that notice, EPA discussed how, under 40 CFR 51.160(e), States can restrict the scope of facilities, buildings, structures, or installations that are subject to review, although the SIP must discuss the basis for such decision. EPA stated that States may exempt from minor NSR those changes that are not environmentally significant, consistent with the de minimis exemption criteria set forth in *Alabama Power Co. v. Costle*, 636 F.2d 323. 360-361, 405 (D.C. Cir. 1979). EPA also discussed the types of sources and modifications EPA would not likely consider as de minimis. Those included synthetic minor sources and netting transactions (i.e., when a source proposing a modification obtains "internal offsets" such that its net emissions increase is less than the major modification significance levels). In both of these permitting situations, the source is trying to obtain Federally enforceable limitations on its emissions. Thus, whenever a source is trying to obtain Federally enforceable limits, EPA's position is that those emission limitations must go through at least some level of public participation. In the August 31, 1995 preamble, EPA stated that since States can exempt de minimis changes from minor NSR altogether, it follows that States may provide a full or partial exemption from the public participation requirements of 40 CFR 51.161, consistent with the environmental significance of the change. Consequently, EPA

proposed revisions to 40 CFR 51.161 as discussed above to provide for full or partial exemptions from public participation.

Review of the Proposed Revisions to Montana's De Minimis Rule

In reviewing the proposed revisions to Montana's de minimis rule against the criteria discussed above, EPA has identified several concerns about the State's exemptions from its NSR program. As discussed in greater detail in the enclosure to this letter, it appears that the State may be exempting certain actions from permitting requirements that EPA would not consider to be de minimis, such as netting actions. Further, EPA is concerned that the de minimis exemptions as written could compromise adequate implementation of the State's major source permitting programs. In addition, EPA questions whether the State's de minimis rule will adequately ensure that modified sources don't cause or contribute to a violation of the NAAQS or interfere with the control strategy. EPA is especially concerned about the impact these exemptions could have on the State's plans to bring areas in violation of the NAAQS into attainment. Finally, EPA has major concerns about the provision that allows changes to emission limits or production limits established in preconstruction permits without going through full NSR permitting procedures (including public review and comment).

In these proposed revisions to the de minimis rule, the State has added a provision requiring advance notification to the State when a source is proposing certain de minimis modifications. We believe this is an essential requirement and should be required for all physical changes or changes in operation that are not already allowed in the permit or covered under existing State/Federal malfunction, startup, shutdown, or other excess emission reporting requirements. Such notice should be required at least ten days in advance of beginning actual construction on the modification (rather than in advance of startup of the modification), so that the State has the ability to prevent the construction or modification of a unit if the increase in emissions would cause or contribute to a violation of the NAAQS or interfere with the SIP, or if the modification would be subject to major modification permitting requirements. We also believe the State should have either an approval role or veto authority to ensure that a modification that should not be considered de minimis does go through full State and public review (in case the State has not identified all of the potential circumstances in its rule when a permit modification might warrant more detailed review). Such advance notification would help to ensure that this rule does not conflict with the major source permitting requirements and the requirements of the minor source program to be able to prevent construction or modification of a source if it would cause or contribute to a violation of the NAAQS or interfere with the control strategy (although, as detailed in the enclosure, this would not address all of EPA's concerns with this rule).

EPA has explained in detail our concerns with the proposed de minimis rule in the enclosure and, where possible, we have suggested revisions that might address our concerns. If the State plans to move forward to revise the de minimis exemptions from its NSR permitting requirements, then we strongly recommend that the State consider the issues raised in this letter to ensure protection of the integrity of the State's major source permitting programs and its plan

to attain and maintain the NAAQS. When this revision is submitted as a SIP submittal, the State must explain the basis for these exemptions, pursuant to 40 CFR 51.160(e), including why the State believes the mandates of the Act regarding major source permitting and NAAQS compliance will not be compromised under the State's de minimis rule.

If you have any questions about this letter or the enclosure or if you want to discuss these issues in further detail, please feel free to contact me at (303) 312-6005, or have your staff contact Vicki Stamper at (303) 312-6445.

Sincerely,

Richard R. Long, Director
Air and Radiation Program

Enclosure

cc: Bob Raisch, Planning, Prevention, and Assistance Division, MT DEQ
Dave Klemp, Air and Waste Management Bureau, MT DEQ

Enclosure

EPA has the following comments on the State's proposed revisions to its de minimis rules in ARM 17.8.705 and 17.8.733:

1) As a preliminary matter, EPA has concerns about the modification size cutoff (15 tons per year (tpy)) that the State proposes as de minimis. Fifteen tpy represents the major modification significance level for one criteria pollutant (PM-10) and exceeds the significance level for another criteria pollutant (lead) as well as for several non-criteria pollutants. It also exceeds the major source threshold for hazardous air pollutants (HAPs). It is thus not de minimis in the sense of having trivial environmental effect. EPA has agreed in the context of part 70 operating permit programs that certain activities with emissions of 5 tpy or less may be considered "insignificant." However, EPA never before denoted emissions increases as high as 15 tpy as de minimis. EPA requests that the State provide an explanation of why it believes emission increases as high as 15 tpy should be considered as having trivial environmental effect.

2) In ARM 17.8.705(1)(q), the State is proposing to exempt routine maintenance, repair, and replacement of equipment from the requirement to obtain a preconstruction permit. This exemption for routine replacement in the definition of "major modification" has often been misinterpreted. For example, a source could replace a piece of equipment with a more efficient piece of equipment that could allow the source to increase production above what it was physically capable of achieving before the replacement and thus increase emissions. Such a "debottlenecking" action would not be considered routine replacement and should be reviewed for its impact on the NAAQS and the State's control strategy, as well as for its applicability to major source permitting requirements. Thus, while EPA generally does not believe a permit is necessary for routine replacement, EPA does believe that some advance review of the planned action should occur by the State to ensure that the activity is "routine." Therefore, EPA recommends that the State delete routine replacement from ARM 17.8.705(1)(q) and add it as a subset of ARM 17.8.705(1)(r), so it will be subject to the advance notification requirements of ARM 17.8.705(1)(r)(ii).

3) EPA believes that advance notice to the State of the changes which a source is claiming as de minimis is essential to ensure that modifications which should otherwise trigger new source review permitting are not exempt from review. However, EPA does not believe 10 days before startup or use of the change is adequate advance notice. First, the State needs to be able to prohibit construction of a new or modified unit if the modification to the source would cause or contribute to a violation of the NAAQS or interfere with the control strategy, or if the modification is subject to PSD or nonattainment NSR permitting. If a source has already begun construction on an emissions unit by the time the State is notified of the source's planned modification, then the State would not be able to meet the requirements of 40 CFR 51.160(b) if the State determines that the modification could cause or contribute to a violation of the NAAQS. Also, if the modification were subject to PSD or nonattainment NSR permitting requirements but no one realized it until the State reviewed the changes, then the source would be in violation of

the major source permitting requirements for commencing construction prior to obtaining the appropriate permit. EPA and States have historically found that it is much more difficult to ensure compliance with major source technology requirements such as best available control technology (BACT) if the source has already commenced construction and built up equity in the design of the modification. Thus, EPA believes the State must require notification at least ten days in advance of beginning actual construction on a modification to a source.

In ARM 17.8.705(1)(r)(iii), the State has listed some types of activities that can be exempt from advance notification requirements, including the addition, modification, or replacement of pumps, valves, flanges, and similar emissions sources. EPA wonders whether some of these activities would fall under the routine repair and maintenance exemption in ARM 17.8.705(1)(q). In any case, EPA believes the State should require advance notification for any type of replacement or addition of equipment, because these types of activities could result in an increase in emissions.

The State has also exempted from advance notification day-to-day fluctuations occurring as the result of a source's design or permitted operations including startup and shutdown. EPA is confused as to why these activities are listed here. Day-to-day fluctuations would not normally be treated as a modification subject to preconstruction permitting. However, excess emissions that occur during day-to-day operation, including those due to startup, shutdown, and malfunction, are required to be reported to the State in accordance with the applicable State or Federal (e.g., New Source Performance Standard (NSPS)) requirements. Thus, EPA believes this provision in ARM 17.8.705(1)(r)(iii)(A) should be deleted, as it is confusing and potentially could allow sources to not report their excess emissions.

EPA also wonders if ten-days advance notice will always be adequate for the State to determine if a modification to a source should be subject to permitting requirements, especially considering the limited information requested from the source in ARM 17.8.705(1)(r)(iv). EPA believes the rule should be written to give the State the authority to request further information or have additional time before the modification can go forward.

Further, the State's proposed de minimis rule does not appear to give the State the authority to prevent a modification from being exempted as de minimis. In other words, the State should have the authority to require a permit for a modification even if it appears to meet all of the criteria of the State's de minimis rule. There may be many situations where the State will want or need to use this authority, such as in response to significant public interest or in the event that the State's de minimis regulation may not explicitly exclude all of the modifications that should NOT be exempt from permitting requirements.

Last, in ARM 17.8.705(1)(r)(iv), regarding the notification required to the State "in the event of an unanticipated circumstance causing the de minimis change," the proposed rule specifies that the State should be notified as soon as "reasonably practicable." These types of changes would likely be due to malfunctions, which should be covered under the State's

malfunction regulations. In other situations, EPA believes the State should have a deadline for reporting these types of changes, such as "as soon as reasonably practicable but no later than five days after beginning actual construction on the de minimis change."

4) EPA has major concerns with the implementation of the de minimis rule for sources located in or impacting nonattainment areas (or areas which are subject to an EPA SIP call, such as Billings or Kalispell) which are proposing to increase emissions of the pollutant of concern. When the State adopts an attainment plan for such an area, that plan is based on presumed emissions from all existing sources in the area. Any modification which allows an increase in emissions from an existing source could jeopardize the State's plan for attaining the NAAQS.

It is not clear that ARM 17.8.705(2) would effectively prohibit a modification that would interfere with the State's attainment plan for an area. While the second sentence of ARM 16.8.705(2) allows certain types of permit conditions to be changed only if such change doesn't violate the SIP, this would presumably not include changes at sources which were modeled at a certain level of emissions in the attainment demonstration but which aren't subject to any specific condition of the SIP. Further, the third sentence of ARM 17.8.705(2) allows emission limits or production limits to be changed, and it appears that such changes are allowed even if those limits are specified in any statute, rule, or the SIP. Thus, unless the State can adequately demonstrate to EPA's satisfaction that this de minimis rule won't interfere with the State's attainment plans for areas that are violating the NAAQS, EPA does not believe the State should be allowed to exclude such modifications from permitting requirements.

5) The wording of the de minimis exemption is inconsistent with the implementation of major source permitting requirements and, thus, could be misleading to the regulated community and could result in faulty implementation of the major source permitting programs. Specifically, when a major source undergoing a modification is reviewed for applicability to major source permitting requirements, the permitting agency generally compares the actual emissions of a proposed new or modified unit before the modification to the future potential emissions from the new or modified unit(s) after the change. (See definitions of "net emissions increase" at 40 CFR 51.166(b)(3) and 40 CFR 51.166(b)(21)(iv) in the definition of "actual emissions," as well as page A.41 in the October 1990 NSR Workshop Manual). However, in the de minimis exemption, the State is comparing potential emissions before the change to potential emissions after the change. Using a different test for the exemption could lead to misinterpretation of the major source permitting requirements in subchapters 8, 9, and 10 of the State's regulations. Thus, to avoid confusion and misinterpretation, it would be more appropriate to exempt sources by comparing actual emissions before the modification to potential emissions after the modification, similar to the current Federal major source permitting requirements.

6) In ARM 17.8.705(1)(r)(i)(E), the State provides for modifications to be considered de minimis based on "netting out of review" - i.e., considering emissions reductions that are made Federally enforceable when determining the potential to emit of a modified source. As discussed in the cover letter to this enclosure, EPA stated in its August 31, 1995 proposed rulemaking that

it would not consider netting transactions to be de minimis (see 60 FR 45548). EPA was specifically referring to netting transactions at existing major sources which are proposing to exempt a significant modification from major source permitting requirements by netting out of review. However, EPA has also taken the position that, to be considered Federally enforceable, limitations on emissions or a source's potential to emit must go through at least some level of public participation. In addition, as discussed on page A.36 of EPA's October 1990 NSR Workshop Manual, when any emissions decrease is claimed, then all source-wide creditable and contemporaneous increases and decreases must be included in determining a source's net emissions increase. Montana's de minimis rule does not require this. Such a modification in which the source is netting out of review cannot be exempt from preconstruction permitting requirements as de minimis.

7) EPA is concerned that the de minimis rule could allow a source to violate the SIP, which result is inconsistent with the requirements of 40 CFR 51.160(a) and (b). Specifically, in the list of exceptions to the de minimis modifications in ARM 17.8.705(1)(r)(i)(A)-(E), the State has not excluded changes that would violate the SIP. To address this deficiency, a provision should be added under ARM 17.8.705(1)(r)(i) to state that any construction or changed conditions of operation at a facility that would violate any requirement of the SIP is prohibited. The State cannot allow a source to violate the SIP or change any requirement of the SIP through a preconstruction permit. This includes changes to the SIP compliance-determining methods, reporting requirements, etc. A change in a SIP requirement generally must be accomplished through revision to the SIP and approval by EPA.

8) Similarly, the State cannot allow a source to make significant changes in the terms of its PSD permit, nonattainment NSR permit, or its part 70 permit, without undergoing State and public review. EPA identified this issue in our July 25, 1996 letter on the original adoption of the de minimis rule. The State has proposed to add a provision in ARM 17.8.705(2) stating that conditions in the permit regarding control equipment specifications, operational procedures, or testing, monitoring, recordkeeping, and reporting may be modified if the modification does not violate any statute, rule, or the SIP. This may have been added to address our concerns about the original de minimis rule. However, the Federal regulations and statute do not address whether States can administratively change the conditions of issued PSD or nonattainment NSR permits (i.e., the process for revising those permit terms is not identified in the Federal rules). It has been EPA's policy that only insignificant changes to terms in PSD or nonattainment NSR permits can be made administratively, and that any other changes must undergo full State and public/EPA review. Such is also the case with part 70 sources, as is stated in 40 CFR 70.7(e)(4). In addition, the State cannot revise design equipment, work practice, and operational standards, or approve alternative test methods for sources subject to Federal NSPS or National Emission Standards for Hazardous Air Pollutants (NESHAPs) without receiving prior EPA approval.

9) As discussed above, the State is proposing to add a provision in ARM 17.8.705(2) stating that conditions in the permit establishing emission limits, or production limits in lieu of emission limits, may be changed or added if requested by the applicant. The previously adopted version of

this rule did not allow the State to process modifications at existing sources as de minimis, if the change would violate any emission or production limit in a permit. Now, the State is broadly expanding the scope of changes that could be considered de minimis. Further, under the State's proposed rule, the changes in emission or production limits are not excluded from being considered de minimis even if those emission limits stem from Federal or State statute or regulation or the SIP. EPA cannot envision any acceptable circumstance for changing an emission limit or production limit established in a preconstruction permit through an administrative process without full State, EPA, and public review. Such limitations would generally have been derived from BACT or Lowest Achievable Emission Rate (LAER) requirements for major sources, a requirement of the SIP, a Federal regulation (such as NSPS, a limit on a source's potential to emit (i.e., a synthetic minor limit), or a BACT limit imposed by the State on a natural minor source. EPA does not find it appropriate to revise any of these types of limits without going through a full permit revision with public participation; some of these changes may also require approval from EPA (such as a change in a SIP or NSPS limit). If a situation arises where a source is requesting a very minor change in a BACT limit, the State should contact EPA to determine whether a full permit revision would be required. In any case, EPA cannot approve a provision that allows a source undergoing a physical change or change in the method of operation which would cause it to violate its permitted emission or production limit to revise its emissions or production limits without going through full preconstruction permitting review (including public participation).

Please note that, under 40 CFR 51.166(r)(2), if a source or modification becomes a major source or major modification solely by virtue of a relaxation of any enforceable limitation on the capacity of the source to emit a pollutant (such as a limitation on operating hours or production rate), then that source must meet all of the major source permitting requirements as though construction had not yet commenced on the source. The provision of ARM 17.8.705(2) could also conflict with this requirement.

10) In ARM 17.8.705(1)(r)(i)(D), the State should add at the end of this provision "or under subchapters 8, 9, or 10." If a source is attempting to split up a major modification into several minor modifications, it is probably to avoid permitting under the major source permitting requirements.